## THE NATURE AND ORIGIN OF LIFE, IN THE LIGHT OF NEW KNOWLEDGE

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The nature and origin of life, in the light of new knowledge by Félix Le Dantec

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## FÉLIX LE DANTEC

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Trieste

# THE NATURE AND ORIGIN OF LIFE

In the Light of New Knowledge

By

FELIX LE DANTEC

Professor of the Faculty of Sciences at the Sorbonne

AN INTRODUCTORY PREFACE BY ROBERT K. DUNCAN Author of "The New Knowledge"

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#### TH. RIBOT

PROFESSOR AT THE COLLÉGE DE FRANCE DIRECTOR OF THE "REVUE PHILOSOPHIQUE" WITH REVERENCE AND AFFECTION FROM HIS OLD FELLOW-WORKER

### FELIX LE DANTEC

TY PLAD EN PLEUMEUR BODOU June 17, 1906. "The notion that all the kinds of animals and plants may have come into existence by the growth and modification of primordial germs is as old as speculative thought; but the modern scientific form of the doctrine can be traced historically to the influence of several converging lines of philosophical speculation and of physical observation, none of which go farther back than the seventeenth century. These are :—

"1. The enunciation by Descartes of the conception that the physical universe, whether living or not living, is a mechanism, and that, as such, it is explicable on physical principles. . . ."

HUXLEY, Science and Culture, p. 290 ("The Evolution of the Sum of Living Beings")

## Editor's Preface

PROFESSOR FELIX LE DANTEC, of the University of Paris, stands as perhaps the foremost champion of the mechanical theory of life, and in this book, written especially for the people of our speech, he has given us, in the simplicity of its expression, the clarity of its statement, and the keen logic of it, perhaps the best exposition of this subject extant. The conclusions that he arrives at seem coercive. The body is a mechanism, which in substance, energy, form and movements, proceeds absolutely in accordance with the laws of substance. In the demonstrations contained within this book, Professor Le Dantec has done great service in hastening what will be the inevitable conclusion of science.

But there is a certain demonstration that the book does not contain, and that is, that because the living organism is a mechanism it is necessarily an automaton.

In beginning his exposition of the phenomena of living matter by first casting out all consideration of phenomena "like that which I *feel* passing in myself" Professor Le Dantec permits himself to assume that the body is not only a mechanism (as he demonstrates so clearly) but that it is a fatally determined mechanism, a wholly different matter.

But the fact is that there are other things existing, perceptions, ideas, volitions and feelings, and while they do not necessarily enter into consideration in the proof that the

#### EDITOR'S PREFACE

living organism is a mass of matter acting wholly in the causal sequence, they must be reckoned with before they can be pronounced of no avail in the body's conduct. If life is supposed to be a transcendental entity entering into or transacting the chemical processes, causing them in the sense of using energy, then there is no evidence that such an entity exists. But if on the contrary life is supposed to be a transcendental entity that is associated with the body, and in some measure interacts with it and guides it without interference (and that is by no means inconceivable since recent physics has plunged the ultimate nature of matter into such mystery) then there seems nothing in Professor Le Dantec's book to make unreasonable a belief in the supposition.

ROBERT KENNEDY DUNCAN.

UNIVERSITY OF KANSAS, 1906.

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