

**ENGLISH MEN OF
SCIENCE: THEIR
NATURE AND NURTURE.
[NEW YORK-1895]**

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MEN OF SCIENCE:

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BY

FRANCIS GALTON, F. R. S.,

AUTHOR OF "HEREDITARY GENIUS," ETC

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PREFACE.

I UNDERTOOK the inquiry of which this volume is the result, after reading the recent work of M. de Candolle,¹ in which he analyzes the salient events in the history of two hundred scientific men who have lived during the past two centuries, deducing therefrom many curious conclusions which well repay the attention of thoughtful readers. It so happened that I myself had been leisurely engaged on a parallel but more extended investigation—namely, as regards men of ability of all descriptions, with the view of supplementing at some

¹ "Histoire des Sciences et des Savants depuis deux Siècles."
Par Alphonse de Candolle. Corr. Inst. Acad. Sc. de Paris, etc.
Genève, 1873.

future time my work on "Hereditary Genius." The object of that book was to assert the claims of one of what may be called the "preëfficients"¹ of eminent men, the importance of which had been previously overlooked; and I had yet to work out more fully its relative efficacy, as compared with those of education, tradition, fortune, opportunity, and much else. It was therefore with no ordinary interest that I studied M. de Candolle's work, finding in it many new ideas and much confirmation of my own opinions; also not a little criticism (supported, as I conceive, by very imperfect biographical evidence)² of my published views on heredity. I thought it best to test the value of this dissent at once, by limiting my first publication to the same field as that on which M. de Candolle had worked—namely, to the history of men of science, and to investigate their sociology from wholly new, ample, and trustworthy materials. This I have done in the present volume; and I am confident that one effect of the evidence here collected will be to strengthen the

¹ Or, "all that has gone to the making of." The word was suggested to me.

² Reference may be made to a short review by me of M. de Candolle's work, in the *Fortnightly Review*, March, 1873.

utmost claims I ever made for the recognition of the importance of hereditary influence.

A few of my results, and some of the evidence on which they were based, were given by me at a Friday evening lecture, February, 1874, before the Royal Institution. I have incorporated parts of that lecture into this volume, with emendations and large additions.

It had been my wish to work up the materials I possess with much minuteness; but some months of careful labor made it clear to me that they were not sufficient to bear a more strict or elaborate treatment than I have now given to them.

The pleasant duty remains of acknowledging a debt to my friend, Mr. Herbert Spencer, for many helpful suggestions, and for his encouragement when I was planning this work; and to reiterate my deep sense of gratitude to numerous correspondents, which I have expressed elsewhere in the following pages.

I may add, that four of the scientific men who replied to my questions have passed away since I began to write. Of these, two had sent me complete returns, namely, Prof. Phillips, the geologist, and Sir William Fairbairn, the engineer. As regards the other two—Sir Henry Holland, the physician, had published his

autobiography, but he gave me much help colloquially, and promised more; and Sir Edmund, better known as Count Strzelecki, the Australian traveler and meteorologist, furnished me with very suggestive information, but too incomplete for statistical use.

FRANCIS GALTON.

42 RUTLAND GATE, *November, 1874.*

P. S.—I have to apologize for some faults of style in the earlier pages, due to my not having had as full an opportunity as I had counted upon of correcting that portion of the press.

After I had sent the above to the printer, a friend happened to point out to me the following passage in the "Sartor Resartus" of Carlyle (book ii., ch. 2). It expresses sentiments so nearly akin to those which induced me to write this book, that I am glad to quote it :

"It is maintained by Helvetius and his set, that an infant of genius is quite the same as any other infant, only that certain surprisingly favorable influences accompany him through life, especially through childhood, and expand him, while others lie close folded, and continue dunces. . . . With which opinion, cries Teufelsdröckh, 'I should as soon agree as with

this other—that an acorn might, by favorable or unfavorable influences of soil and climate, be nursed into a cabbage, or the cabbage-seed into an oak. Nevertheless,' continues he, 'I, too, acknowledge the all-but omnipotence of early culture and nurture: hereby we have either a doddered dwarf bush, or a high-towering, wide-shadowing tree; either a sick yellow cabbage or an edible luxuriant green one. Of a truth, it is the duty of all men, especially of all philosophers, to note down with accuracy the characteristic circumstances of their education, what furthered, what hindered, what in any way modified it. . . .'

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