A Philosophical Essay On Probabilities

Laplace Pierre Simon
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A PHILOSOPHICAL ESSAY
ON
PROBABILITIES.

BY
PIERRE SIMON, MARQUIS DE LAPLACE.

TRANSLATED FROM THE SIXTH FRENCH EDITION
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ERRATA.

Page 89, line 22,  for  Pline  read  Pliny
" 102, lines 14, 16,  "  minutes  "  days
" 143, line 25,  "  sun  "  soil
" 177, lines 15, 17, 18, 21, 22, 24, for primary  read  prime
" 182, line 5,  for  conjunctions  read  being  binary
A PHILOSOPHICAL ESSAY ON PROBABILITIES.

CHAPTER I.

INTRODUCTION.

This philosophical essay is the development of a lecture on probabilities which I delivered in 1795 to the normal schools whither I had been called, by a decree of the national convention, as professor of mathematics with Lagrange. I have recently published upon the same subject a work entitled The Analytical Theory of Probabilities. I present here without the aid of analysis the principles and general results of this theory, applying them to the most important questions of life, which are indeed for the most part only problems of probability. Strictly speaking it may even be said that nearly all our knowledge is problematical; and in the small number of things which we are able to know with certainty, even in the mathematical sciences themselves, the principal means for ascertaining truth—induction and analogy—are based on probabilities;
so that the entire system of human knowledge is connected with the theory set forth in this essay. Doubtless it will be seen here with interest that in considering, even in the eternal principles of reason, justice, and humanity, only the favorable chances which are constantly attached to them, there is a great advantage in following these principles and serious inconvenience in departing from them: their chances, like those favorable to lotteries, always end by prevailing in the midst of the vacillations of hazard. I hope that the reflections given in this essay may merit the attention of philosophers and direct it to a subject so worthy of engaging their minds.