

## P R E F A C E.

AFTER the medical society of *Edinburgh* had published those volumes of *Essays*, which have met with so favourable a reception from the public, a proposal was made them to enlarge their plan, and to carry their disquisitions into other parts of nature, beside such as more immediately relate to the branches of medicine. All the sciences are remarked to have a close connexion together ; but none more than those of medicine and natural philosophy : And the society soon observed, that, should it turn its inquiries into more general knowledge, it could reap the advantage of preserving all its old members, and needed but open its door to Gentlemen of other professions, who might enrich it with their observations and discoveries.

Soon after the society had received a new form, several misfortunes happened, which retarded its progress, and have hitherto prevented it from communicating any thing to  
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the public. The rebellion broke out in this country; and both scattered the members for some time, and engaged their attention to subjects, less agreeable and more interesting, than general disquisitions into nature. No sooner were public affairs composed, than we met with an irreparable loss in the death of Mr. MACLAURIN, one of our secretaries. The great talents of that Gentleman are generally known and highly esteemed in the literary world; but the society have, also, particular reason to regret in him the loss of those qualities, which form an excellent academician. Indefatigable himself, he was a perpetual spur to the industry of others; and was highly pleased with the promotion of knowledge, from whatever hands it came. At the time of his death, a number of discoveries, sufficient to have formed a volume, had been communicated to him; but, being mingled with his other papers, have been dissipated by various accidents; and the society could recover but few of them.

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THE object of this society is the same with that of the other academies, which have been established in different parts of *Europe*, the promoting of *natural philosophy*, and of *literature*, by communicating to the public such dissertations as shall be transmitted to them, either by their own members or by others. 'Tis allowed, that these two branches of learning, especially the former, are more promoted by the observation of facts than by the most ingenious reasonings and disputations. To a diligent, and even sometimes to a careless inquirer, many valuable experiments, no doubt, occur; and these would enrich our collections, tho' without this method of conveyance, they would be intirely lost to the public. The united judgments too of men correct and confirm each other by communication, their frequent intercourse excites emulation, and from the comparison of different *phenomena*, remarked by different persons, there often result general truths, of which, from one of these *phenomena*, no man of the greatest sagacity could entertain any

any suspicion. Tho' the collection of experiments seems continually, by means of the learned societies, and the labours of individuals, to be augmenting, we need not entertain any apprehensions, that the world will ever be overwhelmed by the number of confused and independent observations. The heap does not always go on, increasing in bulk and disorder, thro' every age. There arise, from time to time, bold and happy geniuses, who introduce method and simplicity into particular branches of science; and reducing the scattered experiments to more general theorems, abridge the science of nature. Hints of this kind, we hope, may be able to pass thro' our hands; and at worst, our collections will be a species of magazine, in which facts and observations, the sole means of true induction, will be deposited for the purposes of philosophy.

THE sciences of theology, morals, and politics, the society are resolved intirely to exclude from their plan. However difficult the inferences in these sciences, the facts, on which

which they are founded, are extremely obvious; and we could not hope, by our collections, to be, in this respect, of any service to the public. The great delicacy of the subject, the imperfections of human understanding, the various attachments and inclinations of mankind, will for ever propagate disputes with regard to these parts of erudition. And 'tis the peculiar happiness of geometry and physics, that, as they interest less the passions of men, they admit of more calm disquisition and inquiry.

It is not that the society expect or propose, that what they communicate will be intirely above doubt or disputation. The papers, indeed, which they print, were all read before them, and they gave their consent to the inserting them in their collections: But they pretend not to warrant the justness of every reasoning, nor the accuracy of every observation. The author alone of each paper is answerable for the contents of it: And the society are as willing to insert what may be communicated in opposition to the sentiments

ments of any of its members, as in confirmation of them.

THE society are sensible that it belongs alone to the public to decide concerning the value of any invention; and all the merit to which they pretend, is that of exciting the industry of the learned, and of conveying their productions to the notice of the world. They assume not such authority as to stamp their approbation on any performance, even those which they communicate, much less those which have barely been read before them. If ever their testimony has been cited by any author in favour of his books, reasonings, or machines, they hereby declare, that this liberty has been used entirely without their consent or knowledge, and proceeded alone from the fond opinion, which the writer had entertained of his own performance.

WHOEVER will favour the society with any discourse which it comprehends in its plan, may send their papers to either of the secretaries, Mr. ALEXANDER MONRO Professor of Anatomy at *Edinburgh*, or Mr. DAVID HUME Library-keeper to the faculty of Advocates.

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