grandeur, and morality without object and without order; characteristic enough of a barbarous age. There is, also, as the editor himself confesses, *a strange and absurd mixture of profane fables with Christian certainties.* A mixture which our readers will not expect us to commend.

Art. VII. *A Medical and Experimental Inquiry,* into the Origin, Symptoms, and Cure of Constitutional Diseases. Particularly Scrophula, Consumption, Cancer, and Gout. Illustrated by Cases. By William Lambe, M. D. Fellow of the College of Physicians. Mawman. pp. 276. Price 5s. 6d. 1805.

WITH similar invectives to those which Sancho Pança lavished on the official preserver of his constitution, some readers will doubtless be disposed to address the author of a work which prohibits them from drinking of the pure lambent stream; while others, not blest with the sobriety of Reviewers, will readily concur with him in the opinion, that all liquors possess poisonous qualities, in proportion to the quantity of *water* which they contain.

'Sed nunc amisso quæramus seria ludo.'———

By constitutional diseases, Dr. Lambe informs us, he means, those which arise slowly and spontaneously; and concerning which we are hitherto ignorant, whether they are to be attributed to the operation of foreign and external causes, or to an original imperfection in the structure or functions of any of the different parts of the body. Among these, he places scrophula, pulmonary consumption, gout, cancer, mania, epilepsy, and many cutaneous eruptions. However diversified may be the forms and symptoms of these diseases, they may all, the doctor says, be traced to the operation of a common matter, introduced into the system from without. This matter, he thinks, has its origin from the decomposition of animal, and, perhaps, of vegetable bodies. This delcterious matter, which Dr. Lambe designates by the name of SEPTIC POISON, and which, he says, exactly resembles *arsenicated manganese,* is admitted into the body, he supposes, in many ways; but, principally, and most abundantly, under the attractive and unsuspected form of WATER.

'Is not this the very dæmon, which, for so many ages, has tortured mankind; and which, usurping the sensorium, has corrupted, under a thousand forms, both the mind and body? the evil spirit, which has augmented the wants of man, while it has diminished his enjoyments? which has exasperated the passions, inflamed the appetites, benumbed the senses, and enfeebled the understanding? which has converted his fine form into a storehouse of diseases, has blasted the flower of his offspring, and has brought even the strongest of his name to an untimely grave?' pp 17, 18.

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With the hope of embodying this phantasmagorian form, recourse is had to experiments, which are placed at the end of the inquiry; but which we, reversing the order in which the doctor has arranged his materials, shall first examine. As these form the foundation of the building which he has erected, we may, by making them the first objects of our inquiry, directly form a judgement respecting the durability of the superstructure.

In the experiments on water, we find several made with a view of establishing the fact, that the New River water contains a portion of animal matter. Not doubting of this fact, which the recollection of the innumerable animated beings with which all waters teem is sufficient to establish, we do not think it necessary to dwell on this portion of the experiments.

With respect to those which are adduced in proof of the presence of manganese and of arsenic, we shall only consider two results on which the Doctor particularly dwells. The retort in which the residuum of the water had been exposed to destructive distillation, received a deep *blue* stain, indelible by acids, where it had undergone a red heat. This stain, the doctor considers as one of the proofs of the presence of arsenic acid, because Scheele uniformly observed indelible stains of *various* colours in his experiments with arsenic acid, and the different metals. But similar stains will be observed in almost every instance of destructive distillation: the Doctor himself observes, that the same stain is also formed by any animal substance, exposed to destructive distillation. Now since, according to this author, arsenic acid, all animal substances, all vegetable substances, and water, occasion this stain, is it not as fair to infer from this experiment, that arsenic acid contains something of an animal or vegetable nature, as that animal substances possess something of an arsenical nature?

Arsenic, or the white oxide of arsenic mixed with any inflammable substance, on being heated between two copper plates, leaves a *white* stain on the copper. By exposing the ashes of animal matter, with charcoal, to the action of heat between copper plates, a stain was produced, which was internally *dark mixed with crimson spots*, and externally of a *yellower* colour than that which is produced by pure arsenic. From this negative result, Dr. Lambe infers an identity of nature in the two substances. But this can never be admitted: for, as this discolouration of the copper proceeds merely from the oxidation of its surface, the effect may of course be produced by many other substances. We are informed, indeed, in one part of the work, that the stain produced in this manner, on copper, by the residuum from water, could not possibly be distinguished from that caused by pure white arsenic, treated in the same manner. But, in another part of the work, it will be seen, that this experiment proves

proves rather too much; since the impression thus made on the copper, by the residuum of the water, when compared with that made by arsenic itself, is said to be the more distinct of the two!

Here then, conceding every point which our author's hypothesis requires; a substance, in the composition of which, he supposes a most minute proportion of arsenic enters, produces an effect peculiar to arsenic, in a greater degree than is produced by arsenic itself alone.

'I washed out the deliquescent matter, and put the remainder, mixed with a little charcoal powder, between plates of copper, which I exposed to a red heat. The copper received a white stain by this process. A little arsenic was exposed to the same treatment between similar plates. No difference could be observed between these stains in each experiment, unless that the impression made by the residuum of the water, was the more distinct of the two.' p. 16.

Such a result as this, is sufficient to shew that the inferences which Dr. L. has drawn from his experiments, are by no means to be relied on. Our hopes therefore revive, and we trust that we may again venture to employ, without first subjecting it to a chemical process,

'The vehicle, the source of nutriment,
And life, to all that vegetate or live.'

We become, indeed, more confident in our hopes, as we proceed; and find an objection still more powerful, and so obvious that it must offer itself to every tyro in chemistry. In no one of our author's experiments, to prove the presence of arsenic, is the true characteristic of arsenic, the alliaceous smell, ever noticed! This circumstance alone, when the extremely small quantity of arsenic necessary for analysis is considered, is sufficient to shew that the proposed hypothesis is without foundation.

This objection is, however, attempted to be thus obviated. Dr. L. informs us, that he was foiled in every attempt to separate the arseniate of manganese into its constituent principles. But this was accomplished by Scheele, who says, that when the precipitate, the arseniate of manganese, was mixed with charcoal powder in a crucible, and subjected to heat, they flowed, and regulus of arsenic arose in the form of vapour, while the manganese remained behind. Yet, from this failure in his attempt to separate the arsenic from the manganese, in the arseniate of manganese, and from being equally unable to procure any arsenic from the residuum of water, our author contends, that the water is contaminated by this same combination of manganese and arsenic; and hence explains why neither metal can be made to appear by his experiments!

Having shewn how little aid Dr. L.'s hypothesis receives from the direct testimony of experiments, we add, that the collateral evidence,

evidence, derived from observation and reasoning, is far from yielding it effectual support. The following conclusions, deduced from the Doctor's experiments, contain an explicit statement of the opinions he has here advanced.

'1. Common water gives products much resembling those which are derived from animal matter. It is probable, therefore, that it has received a taint from this matter in a state of decomposition, or, in other words, from *putrefaction*.

'2. The metallic basis of the matter, which contaminates common water, exactly resembles *arsenicated manganese*.—These metals unite in a great variety of proportions and different degrees of oxygenation. They form the basis of the matter which I have denominated septic poison. With the other principles I am not correctly acquainted, but they must be those which are common to animal matter. I have hitherto been foiled in every attempt to separate this compound into its constituent principles, whether it be made artificially or be found already formed.

'3. The same compound enters into the composition of animal matter. I have found it in the coal, which remains after the distillation of animal substances, and the ashes to which this coal is reducible by incineration.

'4. As all animal matter is derived from the vegetable kingdom, the same substance must enter likewise into the composition of vegetable matter. It may be readily detected in the ashes of pit-coal, and I doubt not, in common vegetable ashes.

'In a word, then, the decomposition of animal, and, perhaps, of vegetable matter, that is to say, *putrefaction*, I believe to be the great instrument of the destruction of the human species. By this process a matter is developed, which becomes a true and proper poison to the human body. Different systems and different organs of the same system are embued with different degrees of resisting or conservative force. Hence the great body of the race perish prematurely, each at his appointed hour, but with phenomena infinitely varied, according to the varieties of the organs principally affected, the periods of life and the constitutional peculiarities of every individual.' pp. 21—23.

The mode of treatment, by which our author thinks that a stop may be put to the progress of the most contumacious diseases, consists chiefly in the substitution of distilled for common water. Milk, whey, and buttermilk, with such fermented liquors as are formed from pure vegetable juices; such as cider, perry, and good foreign wines, and rum, brandy, &c. diluted with distilled water, are allowed: but salt, and salted meats, are to be used sparingly; while beer, porter, and all liquors the basis of which is common water, are forbidden. At page 7, the case is related, of a gentleman who was much relieved by this mode of treatment. The second case is, of a child who had lost the use of his lower limbs, and seemed to derive advantage from this dietetic course; but with it were joined sea-bathing, and the use of such medicines as seemed adapted to the circumstances of the case. Thus also, in the fifth case, appropriate medicines were

were combined with the dietetic regimen, and were persisted in for seven months. Indeed, it will not be too much to say, that additional and stronger cases will be required; before experience can be admitted to have proved the truth of the doctrines here advanced.

The importance of detecting fallacy in opinions which tend to rob us of one of our choicest blessings, impels us to point out a few instances, in which our author has suffered his judgement to be misled by the doctrine he so industriously endeavours to disseminate.

Alluding to those diseases which he supposes to proceed from the influence of the septic poison, Dr. L. at page 9, says,

'Savage man is almost entirely exempt from their dominion, and he seems to possess a frame, in many points, physically different from that of man, in that degree of cultivation, to which he has hitherto arrived. In proportion as he emerges from his primæval state, do these furies advance upon him, and would seem to scourge him back into the paths of nature and simplicity.'

Having observed, with other physicians, that those who indulge much in the use of punch, become dropsical; our author imputes this bad consequence, not to the alcohol, but to the pernicious effects of the watery vehicle, of which he observes wine is destitute.

While the beauty of the Irish and Lancashire women, and the strength of the Irish men, are attributed, by our author, to the drinking of buttermilk, with their potatoes; so, on the other hand, speaking of the preternatural excitement occasioned by the septic poison, he says,

'In some systems, happily constituted, in which the conservative powers are very great, and uniformly diffused over all the organs, this preternatural excitement may not occasion any apparent disease; but it is inconceivable, that any morbific force should continue perfectly inert, if constantly applied. It may therefore be fairly questioned, whether, in every subject it does not accelerate the period of old age; and whether it has not been a powerful instrument in preventing the race from attaining to that longevity, for which nature seems to have destined it, and to which, as we are informed by tradition, it arrived in the primitive ages of the world. p. 47.

It would evidently be necessary for Dr. L. should he hope to derive any force from these observations, to shew that more water is drank by *civilised* man of the *present* day, than by those who existed *before the flood*, or who now exist in a *savage* state. Until this be done, we trust these observations can have but little weight. Indeed, to dwell on opinions such as these, is entirely unnecessary; except to observe how much the mind of an ingenious and benevolent man, may be warped by an attachment to a darling hypothesis. The industry and zeal manifested

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in this work, by Dr. Lambe, are, however, sufficient to induce us to wish to meet him again; but on ground which he may find more tenable.

Art. VIII. *A Description of the Island of St. Helena;* containing Observations on its singular Structure and Formation; and an Account of its Climate, Natural History, and Inhabitants. 8vo. pp. 262. price 6s. 6d. 1805. Phillips.

WE have had occasions of exciting the public attention to the Cape of Good Hope, as a valuable accommodation to our Eastern trade, when measuring the vast length of the Atlantic and Indian Oceans. The volume before us invites our notice to an object of minor importance, but of similar utility. About a thousand miles from any other land, in S. Lat. 16° W. Long. 6° 30′, rises a rocky island, first discovered, about 300 years ago, by a Portuguese navigator, on his return from India. To honour the saint on whose day he made this agreeable discovery, he called the island St. Helena. From the Portuguese it passed to the Dutch, and from them was wrested by the British arms. Neither its extent, which is in circumference less than thirty miles, nor its soil, (for it is chiefly a mere rock) can give it much importance; but its situation amidst a dreary tract, and its supply of pure water, have gained for it the notice and patronage of the East India Company. Under their auspices it has flourished, the scanty productions of the soil have been multiplied, and the inhabitants have increased to upwards of two thousand.

The anonymous author of this description gives us the result of "a diligent search of five weeks." Judging it, perhaps, more systematical, he commences his description with an account of the materials of which the island is composed. But, as comparatively few readers will enter with much interest on these geological researches; we should have recommended a more popular subject for the commencement and nearly the first half of his volume, rather than an investigation on which the author himself makes the following just remark.

'From the various, opposite, and contradictory views of things, into which even men of science and observation have been led, in their reasonings concerning the structure of the globe; it should seem that Nature, in the manner of accomplishing her great terraqueous revolutions, has hitherto mocked the imbecility of human research.' p. 48.

After labouring to prove the volcanic origin of the whole island, we were rather surprised and diverted, to find the author following the steps of Kircher, to discover in this and other detached spots, the remains of Plato's long forgotten Atlantis.

The climate of St. Helena, notwithstanding its excessive drought,