NATURAL THEOLOGY.

CHAPTER I.

STATE OF THE ARGUMENT.

In crossing a heath, suppose I pitched my foot against a stone, and were asked how the stone came to be there; I might possibly answer, that, for anything I knew to the contrary, it had lain there for ever; nor would it perhaps be very easy to show the absurdity of this answer.¹ But suppose I had found a watch upon the ground, and it should be inquired how the watch happened to be in that place; I should hardly think of the answer which I had before given, that, for anything I knew, the watch might have always

¹ The history of the stone may be read now by the light of Geology: it could not have lain there for ever. But this does not affect the argument.—[Ed.]
been there. Yet why should not this answer serve for the watch as well as for the stone? why is it not as admissible in the second case as in the first? For this reason, and for no other, viz. that, when we come to inspect the watch, we perceive (what we could not discover in the stone) that its several parts are framed and put together for a purpose, e.g. that they are so formed and adjusted as to produce motion, and that motion so regulated as to point out the hour of the day; that, if the different parts had been differently shaped from what they are, of a different size from what they are, or placed after any other manner, or in any other order, than that in which they are placed, either no motion at all would have been carried on in the machine, or none which would have answered the use that is now served by it. To reckon up a few of the plainest of these parts, and of their offices, all tending to one result:—We see a cylindrical box containing a coiled elastic spring, which, by its endeavour to relax itself, turns round the box. We next observe a flexible chain (artificially wrought for the sake of flexure), communicating the action of the spring from the box to the fusee. We then find a series of wheels, the teeth of which catch in, and apply to, each other, conducting the motion from the
fusee to the balance, and from the balance to
the pointer; and at the same time, by the size
and shape of those wheels, so regulating that
motion as to terminate in causing an index, by
an equable and measured progression, to pass
over a given space in a given time. We take
notice that the wheels are made of brass in
order to keep them from rust; the springs of
steel, no other metal being so elastic; that over
the face of the watch there is placed a glass, a
material employed in no other part of the work,
but in the room of which, if there had been any
other than a transparent substance, the hour
could not be seen without opening the case.
This mechanism being observed (it requires in­
deed an examination of the instrument, and per­
haps some previous knowledge of the subject, to
perceive and understand it; but being once, as
we have said, observed and understood), the in­
ference, we think, is inevitable, that the watch
must have had a maker: that there must have
existed, at some time, and at some place or other,
an artificer or artificers, who formed it for the
purpose which we find it actually to answer;
who comprehended its construction, and designed
its use.

I. Nor would it, I apprehend, weaken the
conclusion, that we had never seen a watch
made; that we had never known an artist capable of making one; that we were altogether incapable of executing such a piece of workmanship ourselves, or of understanding in what manner it was performed; all this being no more than what is true of some exquisite remains of ancient art, of some lost arts, and, to the generality of mankind, of the more curious productions of modern manufacture. Does one man in a million know how oval frames are turned? Ignorance of this kind exalts our opinion of the unseen and unknown artist’s skill, if he be unseen and unknown, but raises no doubt in our minds of the existence and agency of such an artist, at some former time, and in some place or other. Nor can I perceive that it varies at all the inference, whether the question arise concerning a human agent, or concerning an agent of a different species, or an agent possessing, in some respects, a different nature.

II. Neither, secondly, would it invalidate our conclusion, that the watch sometimes went wrong, or that it seldom went exactly right. The purpose of the machinery, the design, and the designer, might be evident, and in the case supposed would be evident, in whatever way we accounted for the irregularity of the movement, or whether we could account for it or not. It
is not necessary that a machine be perfect, in order to show with what design it was made: still less necessary, where the only question is, whether it were made with any design at all.

III. Nor, thirdly, would it bring any uncertainty into the argument, if there were a few parts of the watch concerning which we could not discover, or had not yet discovered, in what manner they conduced to the general effect; or even some parts, concerning which we could not ascertain, whether they conduced to that effect in any manner whatever. For, as to the first branch of the case; if by the loss, or disorder, or decay of the parts in question, the movement of the watch were found in fact to be stopped, or disturbed, or retarded, no doubt would remain in our minds as to the utility or intention of these parts, although we should be unable to investigate the manner according to which, or the connexion by which, the ultimate effect depended upon their action or assistance; and the more complex is the machine, the more likely is this obscurity to arise. Then, as to the second thing supposed; namely, that there were parts which might be spared, without prejudice to the movement of the watch, and that we had proved this by experiment,—these superfluous parts, even if we were completely
assured that they were such, would not vacate
the reasoning which we had instituted concern­
ing other parts. The indication of contrivance
remained, with respect to them, nearly as it was
before.

IV. Nor, fourthly, would any man in his
senses think the existence of the watch, with its
various machinery, accounted for, by being told
that it was one out of possible combinations of
material forms; that whatever he had found in
the place where he found the watch, must have
contained some internal configuration or other;
and that this configuration might be the struc­
ture now exhibited, viz. of the works of a watch,
as well as a different structure.

V. Nor, fifthly, would it yield his inquiry
more satisfaction to be answered, that there
existed in things a principle of order, which
had disposed the parts of the watch into their
present form and situation. He never knew a
watch made by the principle of order; nor can
he even form to himself an idea of what is
meant by a principle of order, distinct from
the intelligence of the watchmaker.

VI. Sixthly, he would be surprised to hear
that the mechanism of the watch was no proof
of contrivance, only a motive to induce the
mind to think so.
VII. And not less surprised to be informed, that the watch in his hand was nothing more than the result of the laws of metallic nature. It is a perversion of language to assign any law as the efficient, operative cause of anything. A law presupposes an agent; this is only the mode, according to which an agent proceeds; it implies a power; for it is the order according to which that power acts. Without this agent, without this power, which are both distinct from itself, the law does nothing; is nothing. The expression, "the law of metallic nature," may sound strange and harsh to a philosophic ear; but it seems quite as justifiable as some others which are more familiar to him, such as "the law of vegetable nature," "the law of animal nature," or indeed as "the law of nature" in general, when assigned as the cause of phenomena, in exclusion of agency and power; or when it is substituted into the place of these.

VIII. Neither, lastly, would our observer be driven out of his conclusion, or from his confidence in its truth, by being told that he knew nothing at all about the matter. He knows enough for his argument: he knows the utility of the end; he knows the subserviency and adaptation of the means to the end. These
points being known, his ignorance of other points, his doubts concerning other points, affect not the certainty of his reasoning. The consciousness of knowing little need not beget a distrust of that which he does know.
CHAPTER III.

APPLICATION OF THE ARGUMENT.

This is atheism: for every indication of contrivance, every manifestation of design, which existed in the watch, exists in the works of nature; with the difference, on the side of nature, of being greater and more, and that in a degree which exceeds all computation. I mean that the contrivances of nature surpass the contrivances of art, in the complexity, subtlety, and curiosity of the mechanism; and still more, if possible, do they go beyond them in number and variety; yet, in a multitude of cases, are not less evidently mechanical, not less evidently contrivances, not less evidently accommodated to their end, or suited to their office, than are the most perfect productions of human ingenuity.

I know no better method of introducing so large a subject, than that of comparing a single