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RELIGIOUS COMMUNICATIONS.

THE EFFECTS OF PHYSICAL TEM-PERAMENT ON THE EXPRESSION OF RELIGIOUS FEELING.

(Continued from p. 290.)

THERE are individuals who have viewed the occasionally unimpaired, and even increased, thought and vigour of mind towards the close of life, as an evidence of the immateriality, and consequent immortality, of the soul. But it is neither; and therefore the idea should not be entertained, since, if erroneous, it can scarcely be held without evil effects. And so it is in the present instance; for if the state just detailed be received as lawful evidence of the soul's immateriality and eternal existence, then the opposite, and by far the more frequent state, in which the mental manifestations are obscured or perverted by disease, must be received as lawful evidence of its materiality, decadence, and consequent approach to extinction,-a conclusion which none but the most infatuated would allow. The truth is, that the mind is depending for the integrity of its manifestations, upon the health of its organ, the brain. And when organic life is verging to dissolution, when all the functions of the body, depending upon the brain for their continuance, are fully performed; and when every circumstance proclaims the approaching separation of all that is mortal in man, from his spi-

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ritual nature; it is quite impossible to expect that the manifestations of his mind should not also be impaired; much less, that they should generally be brightened, and rendered more vivid and intense. True it is, that this phenomenon may be observed in some rare instances: and it may then be accounted for on the principle mentioned above, in explaining the remarkable degree of independence of some minds physical causes; namely, partly upon original constitution, partly upon the force of moral influences. But these instances form exceptions to the general rule, which undoubtedly is, that the manifestations of mind are rendered feeble or obscure, inefficient or perverted, exactly in proportion as its organ may have been subjected to the influence of disease.

Many persons who are anxious for a triumphant death-bed, are not aware how much of animal fervour may be mingled with such expressions of ecstacy. But, let them be cautious how they place any reliance upon phenomena of this kind. Death is a fearful event; and although disarmed of its terrors to the Christian, it is still a violence from which nature shrinks; and to the failing powers of the body, the quiet confidence of submissive hope, "Thy will done," will be far more appropriate than that exulting language which depends more upon animal excitation than upon spiritual at-

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church almost exclusively in its connexion with the state, or who takes a certain line of doctrine currently called "orthodox." Not one of these suppositions is correct. A highchurchman, properly speaking, is, a man who considers the episcopal church, with its threefold order of ministration, as the appointed instrument of conveying the blessings of salvation to mankind; as possessing spiritual authority, derived immediately from Christ, the only Head of the Church; as neither directly nor indirectly the creature of political creation; as independent of the state, and equally honourable and legitimate-I do not say, equally efficient-should the patronage of the state be withdrawn from it. A highchurchman may be either Calvinistic or Arminian; a friend to monarchy

in Europe, or a republican in America; what is called "orthodox," or what is called "evangelical," in his theological opinions; Whig or Tory in his politics; connected with the state in England, or detached from it in Scotland; but he must, every where, entertain the above-mentioned views of the church, as a spiritual, a divinely-appointed, an independent, and, in some sense, an exclusive institution. It is for the reader to consider whether or not he approves of these principles; my only object being, at present, to define the term used to express them, since the correct definition of terms is an important step towards a mutual understanding of things. It is not of importance to add whether the writer of this paper is or is not

A HIGH-CHURCHMAN.

MISCELLANEOUS.

To the Editor of the Christian Observer.

THE PHILOSOPHY OF MODERN GEOLOGY.

It is a principle assumed by many, and evidently implied in the letter of Oxoniensis Alter, that modern geology is built upon the evidence of facts analogous to the "principles of natural philosophy of Sir Isaac Newton;" and that I have acted like Hutchinson, when he opposed Sir Isaac's philosophy, " on the assumed ground, that it opposed the Mosaic cosmogony." With your permission, I will examine this point, though it must be with a brevity that will leave the subject in a very unsatisfactory state, on account of the multiplicity of objects bearing I will afterwards inquire upon it. whether my own notions of the formation of the "fossil strata" are equally void of philosophy and truth.

All admissible philosophy is founded on experiment, or established

by phenomena or fact. This modern geologists acknowledge. We find them, therefore, speaking continually of facts, phenomena, and consequent demonstration; which, if they made good their professions, would establish their system, and deserve the praise of mankind. But how is their profession borne out? Sir Isaac Newton admits, as legitimate causes in the operations of nature, such only as are " true and sufficient." He observed the fall of apples in the garden; he tried various sorts of materials, and found them all possessed of the same property of tending to the earth; which property he called gravity; and when he constructed his theory of the motions of the planetary system upon these experiments, he found the result to correspond with observation. Now the question is, have geologists any analogous facts upon which they build their modern theory? Two queries may here be put :-

1. What supposed facts would be

"sufficient" to prove the modern theory to be true?

2. Have geologists ascertained that such supposed facts really exist; namely, "are true?"

If such facts and such proofs as are necessary to demonstrate the modern theory, can be really shewn to exist, some analogy to the true "principles of philosophy," established by Sir Isaac Newton, may be justly claimed; but not otherwise. But then, these supposed facts must be proved beyond the possibility of reasonable objection, or else they are not proved, but assumed. There are several points essential in this supposed demonstration.

First. As modern geology involves facts which have long ago taken place, and of which no historical record gives any account, those facts must be proved by analogy, or by their correspondence with what

we know to exist.

Secondly. These facts must be consistent with themselves; their operations must correspond with the known operations of nature; and their inevitable (necessary) consequences must be such only as may be accounted for, or admitted, without prejudice to known facts, or established philososophy.

Thirdly. As all physical operations are caused by the same Being who has given us a record of some of his works, those supposed facts must not be inconsistent with that

record.

In pursuance of this subject, I may be allowed to observe, in reference to my former communications, that I believe a strong case has been laid before the reader, in which it appears, that nothing like a consistent accordance with the Scriptures has hitherto been shewn by geololists; and that it has been shewn further, that the assumed facts are not only unproved, but disproved; that the theory is inconsistent with itself; that it will not work, under any circumstances; and that it involves a constant series of new creations, both of animals and of matter.

My duty, therefore, so far as the subversion of modern geology is concerned, may be considered as finished, till some better answer is given to the arguments I have ad-

But what I have further to advance against the theory of modern geology is, that

Its philosophy is bad.

The only foundation upon which it is professedly built is analogy; a good and right foundation, supposing it to bear; but it unfortunately turns out, that analogy wholly for-sakes it. This may be a startling declaration; but it is true. are two branches to this subject, each of which is essential to the system: one respects the animal, the other the physical, creation. may just say a few words respecting

The philosophy of animals. The whole of Baron Cuvier's professed demonstration rests upon the author's assumed knowledge of "comparative anatomy." By his skill in this science he claims to know, "by a single bone," or "half a bone," from what animal it is derived. And from this datum alone, he professedly constructs his theory of numerous revolutions; except some theoretical aid, which, in a former part of his book, he seemed willing to derive from the shelly strata; but which, however, Mr. Jameson admits, Baron Cuvier does not much understand, and which, in fact, he has given up.

Baron Cuvier asserts, from his knowledge of the bones of animals, that a succession of revolutions has taken place in our globe; and that this is demonstrated by the successive appearance in the fossil strata, of animals which he calls "extinct genera;" then the "extinct species;" and lastly, the "existing species:" thus marking to a demonstration, two or three (a while before he had asserted "numerous") revolutions. It is obvious, however, that a certain knowledge of the respective and distinguishing situations of the alleged extinct animal remains, is absolutely necessary, in order to lay the first stone of his theory. I have already shewn, from his own admission, that he has frequently received "no information whatever" upon the subject; and even that the information which is obtained is quite subversive of the theory.

All that I need say more upon this subject is, that this assumed philosophy of animals is bad in two

respects.

1. It is defective or erroneous as a science. It leads our author to assert, contrary to the declaration of Moses, and the certain knowledge of every person, that every print of a "cloven hoof" is a certain mark that a "ruminant animal" has been there; when the whole swine tribe is evidence to the contrary. M. Cuvier is led, moreover, by the same philosophy, to view the "Tartars" and "Negroes," as both springing from a different race to Europeans; thus contradicting the positive decision of the Bible, and the almost universally admitted philosophy of the human race.

2. It is ruinous in its application. For if M. Cuvier's science could prove that in each successive revolution there was a real extinction of the previously existing species, it would introduce a difficulty infinitely greater than the one it removed. It only removes a difficulty arising from the present existing species being considerably different from their predecessors, supposed to be their ancestors. But the difficulty which it brings with it, can never be got over. It is easy to believe that the present races of animals may differ very greatly from ancient animals, and yet that they might spring from them. But it is difficult indeed to believe that the present races, since Adam's time for instance, sprung from no ancestors at Hence arises, in this modern theory, the death-like consequence that every revolution must have been followed by new creations.

II. The philosophy of the physical creation.

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To be sure, we should suppose that modern geologists had sure and certain facts, by the analogy of which they can sustain their pretensions to demonstration respecting the physical character of their The physical nature of the modern theory is, that the "fossil strata" were " quietly deposited in a fluid," namely, the sea, and were deposited "horizontally;" and were subsequently overturned by violence, and raised up into their elevated or "inclined positions."

Now where is the analogy which is adduced in proof of this? There is none. M. Cuvier expressly declares, after various chapters spent in the examination of the existing causes of natural operations, that " all these causes would not, though combined, form a single stratum of any kind, nor produce the smallest hillock," similar to her "ancient works." This is said respecting the deposition of the fossil strata. to their subsequent revolutions he writes, " Thus we shall seek in vain among the various forces which still operate on the surface of our earth, for causes competent to the productions of those revolutions."

Here we are plainly, expressly, and repeatedly instructed, that no existing operations in the physical world, have any likeness to those of the ancient fossil strata; and that they could not produce the least similar formation. Where, then, is the "philosophy of Sir Isaac Newton" in all this? Where is the analogy upon which modern geology erects its theory? It has no analogy, and there is no true philosophy in its nature. I need not pursue this subject.

I would make one reflection on the foregoing positions; namely, that the theory of modern geology is either built entirely without a formation, and without evidence, or, if assumed to be true, it involves consequences which are destructive of the first principles of its own existence.

1. It assumes, but does not prove, 3 B

a series of successive operations, formations, and revolutions, in the fossil strata.

2. If these assumptions were allowed, the theory would inevitably die by its own hand; because those operations and revolutions are not only without any assignable cause, but are positively miraculous. is not only admitted, but contended, that all the powers of nature are quite unequal to the operations assumed. Thus those operations are clearly above and beyond all the nowers of nature: they are preternatural; that is, they are miraculous. The successive species (the former being extinct) must come from a new creating hand. Thus another miracle must ensue.

This, then, destroys the first principles of the theory, and rushes into consequences almost infinitely further removed from the ordinary course of nature, than is the difficulty which geologists seek to avoid by adopting their theory. The only difficulty which needs to be admitted is, the comparatively slight variations in the animal creation, between the fossil remains and the existing species; variations which surely it is no way unnatural to believe Divine Providence may have effected, by natural causes, in several thousand years. This, however, modern geologists deny; and have therefore invented their present But the theory almost theory. instantly runs into the very difficulty it is constructed to escape: namely, a deviation from the ordinary course of nature.

This theory, therefore, in effect says, Divine Providence has not caused the changes from the fossil animals to the present, because analogy admits of no such variations in posterity from their ancestors. But now the theory contradicts its own principles, and asserts that God has not only caused these changes in the species, but has done it by destroying the former, and producing new species: and this, not by a long course of time, but

in an instant. Which, now, is the more credible; that animals should degenerate, or that they should arise from nothing? We know that animals have degenerated, and do degenerate: all analogy justifies us here. But we know of no animals now rising up without Philosophy, as well ancestors. as the Bible and common sense, teaches us to abide by the least difficulty, and that which deviates least from all we know and find re-We are compelled, then, by religion, by philosophy, and by truth, to reject the theory of modern geology; because it is the greatest deviation from the usual and known course of nature. That is, it is unnatural, it is unphilosophical, it is untrue.

I am reminded, that Professor Buckland's theory of the caves, and his description of diluvial operations, seem to wear an independent and demonstrative character; and may, therefore, be true, whatever becomes of the Baron Cuvier's theory. Those who assert this know or consider very little what they say. Buckland's theory is not a new and independent theory. It is M. Cuvier's theory, in every essential part of it, and they necessarily stand or fall together. However, Dr. Buckland's "Reliquiæ Diluvianæ" have a variety of particulars which are defended upon grounds which admit of a separate consideration; and which many hold, or have held, to be valid. I cannot enter, and it would be needless to enter, much at large into a distinct examination of the Oxford professor's views of the fossil phenomena. A few observations may suffice.

The facts which Dr. Buckland describes, I do not, as facts, dispute. But I consider his theory, in every essential part of it, as demonstrably erroneous, upon physical principles, independent of Biblical considerations; though they, likewise, bear a decisive testimony against it. Dr. Buckland entitles his book "Reliquie Diluvianæ;" and aims through-

out to prove the operations and effects of Noah's flood, -an object well worthy of a divine and a geologist. And this work is pronounced, in the Quarterly Review to be the first book which has placed that long-contested subject "beyond the reach of controversy or cavil." Notwithstanding this panegyric, however, I think it perfectly demonstrable, that Professor Buckland has not adduced, and cannot, without overthrowing the modern theory of geology which he so strenuously defends, adduce any substantial evidence of the scriptural deluge. His principal testimonies are,

Denudations, the contents of caves, and fossil bones.

The particular "fossil bones," upon which he most relies in proof of the deluge, are those which he and Baron Cuvier consider to be the remains of extinct animals. But the "extinct" animals, let it be remembered, were, according to their theory, destroyed before the existing species had a being; that is, before our creation. They could not therefore, consistently with the theory, be destroyed by Noah's flood.

The denudations, consisting of the transport of fragments of rocks, and of valleys and channels cut or torn out of solid rocks, appear to contradict all the known operations of the laws of nature. The diluvial waters are represented as carrying masses of rocks, many hundred tons weight, over deep valleys, or upon very high hills, and leaving them there, instead of throwing them, according to every known action of running waters, into the valleys below: as conveying masses of pebbles over valleys many miles wide, and not leaving any pebbles in the valleys, but depositing them forty or fifty miles from their source, upon the very loftiest summits in the neighbourhood: as tearing away solid strata for the compass of thirty or forty miles, and leaving loose insulated fragments behind: as rending the summits of the rocky mountains, and depositing their massy fragments upon the summits of lofty sand or clay hills, which are left

quietly standing.

The diluvial waters, moreover, are represented in their retreat as cutting out narrow and deep channels in the solid rocks, some of which are fifty feet deep, and not much more than a hundred feet wide; and this, too, on table land, which was previously a "plain;"--as forming those narrow valleys, in which are four rivers (in the district of Muggendorf), which four rivers, in the distance of two miles, run in four different directions; and, being united, take a course different from them all; making five different, or opposite courses in the space of about two miles. This is utterly incredible when we consider that the deluge, when it began to retire, must, on the least computation, have been several miles in depth. Besides, an universal deluge is sustained very much in equilibrio by its own ubiquity. And the laws of hydrostatics forbid us to allow, in such circumstances, that any such unequal pressure could take place as was necessary to cut out such deep and almost perpendicular channels. Dr. Buckland views the diluvial waters as moving with the rapidity of a mountain torrent, in cutting out these valleys. velocity, though quite inadmissible, would have left this high "table land" dry, in less than an hour.

The cave theory of Dr. Buckland rests greatly, perhaps chiefly, upon two circumstances; namely, first, "A bed of loam, or diluvial mud;" and, secondly, "Rolled diluvial pebbles."

The bones of extinct animals, I have already noticed, are no evidence of Noah's flood. I shall just make a remark on the dirt in these caves, called by Dr. Buckland, "Diluvial loam or mud;" by which he means a peculiar mud, formed and introduced into the caves by the deluge. That this loam was not "produced" by the

flood, and then taken into the caves, is evident, because the caves were open at top, and the rising waters would instantly run into them, and carry in that only which lay near to the mouths of the caves; which could no more be called "Diluvial mud" than the soil adjoining the respective caves could be so called. And the nature and quality of such earth would be the same in the caves, had it been introduced by heavy rains, or otherwise.

The alleged "diluvial pebbles" are more evidently still, if possible, not diluvial, nor introduced by the diluvial waters. Many of these pebbles are very large and heavy, and have been carried over horizontal, or even rising, floors, forty, fifty, or even many more feet from the chimney or neck through which they are supposed to have been carried by the diluvial waters into the cave. This cannot for a moment be allowed, on many grounds.

1. The diluvial waters would (in the first instance) immediately flow into the caves as they rose, and, if the rise were rapid, would fill them in a few minutes. So that there could not possibly be time enough for the deluge to become deep and violent, so as to tear up "ancient," "impracticable," "transition" rocks, and round them into pebbles, before the caves would be filled with water. And if the diluvial waters advanced slowly and gradually, it is impossible they should have power to rend and round the fragments of rocks into pebbles.

2. The rushing waters of the deluge could not carry these pebbles into the very distant situations which they occupy in the caves. For if they broke forth very violently, and carried the pebbles into the caves, the pebbles would chiefly lodge at the bottom of the long neck or chimney down which they had been hurried. For the waters would immediately expand, and their headlong force would abate as they advanced over the breadth of the yault. But many of the pebbles

are found in the largest numbers at the greatest distance from the entrance, and even behind strong impediments. This is, contrary to all philosophy, established upon actual experiment.

3. No subsequent diluvial action could introduce these pebbles to their distant situations, after the caves became filled with water. For being once filled, no more water could enter; and the waters already there would become quiescent, and could not, therefore, carry pebbles their distant recesses. heavy materials, drifted over the mouth of the caves, might certainly fall in, but they could gain admission into the caves no further than the force of gravity would urge them. But this would lead them no further than about the bottom of the funnel through which they fell into the caves; for their own tendency would be to rest, and the waters in the caves would be at rest before the pebbles entered. So that we may truly say, it is physically impossible that these large, well-rounded pebbles, could have been so formed, and then introduced into the caves by the diluvial waters.

The anomalies, inconsistencies, and impossibilities, attendant upon Dr. Buckland's description of the contents of the caves, are exceedingly numerous. These, in many ways, had I time, and you room, for their consideration, would exhibit such a body of evidence as would not easily, beforehand, be credited, in proof that not only the contents of the caves, but the caves, and even the rocks themselves, were none of them in existence before The proofs that the the deluge. contents of these caves are not of diluvial origin, are perhaps more numerous than the caves themselves. I may allude to one or two.

In the Hutton cave, in the Mendip hills, as described by Dr. Buckland, there are many apartments, all of which received their contents through the same entrance, which

is a large funnel, as big as six modern chimney flues, and twenty feet in depth. This wide flue "was filled with good ochre;" but the cave beneath it had ochre only on the "floor;" which is quite impossible, from the laws of gravity, where there is no obstruction in the way. Some of these apartments contained clean good ochre, while others, fed by the same diluvial waters, and at the same entrance, contained nothing but rubble, stones, ochre, and bones. "bones," moreover, are said to have been "strewed on the surface" of the "ochre" which lay upon the "floor" of the cave. This, again, is quite repugnant to the laws of gravity. For this, when it entered the cave, is supposed to have been only muddy water, to the bottom of which the bones would have necessarily descended.

The cave of Biets, in Germany, is an anomaly in nature. It has walls, ridges, or "pinnacles," running across it, which are narrow at top, and require to be passed by a ladder. Now, if this cave had been filled with water, loaded with mud, the water would have deposited the mud in the bottom of the cave, till it was filled up to the top of the " pinnacles;" but upon the narrow top of those pinnacles there would have been none, or next to none, till the whole was glutted up to their tops. A sure proof, then, that this mud was not so deposited is, that the ridges of the "pinnacles" have nearly the same depth of mud upon them as the vault itself, which is absurd.

I shall only mention one instance more; namely, Gailenzeuth. In this cave, at the distance, in a horizontal direction, of eighty or a hundred feet from the entrance, there is a well or cellar, "twenty-five feet in depth." This well contains pebbles, loam, and bones. "This distribution of the component materials of this breccia is irregular; in some parts the earthy matter is wholly wanting, and we have simply a

congeries of agglutinated bones; in others, the pebbles abound; in a third place, one half of the whole mass is loam, and the remainder teeth and bones: at the top and bottom of the well, pebbles and bones occur mixed together in the same proportions as in the middle regions of it." Further, Dr. Buckland says, " All these phenomena are in a perfect harmony with those of the other caves in Germany and England." " The diluvial waters rushing, as they would not fail to do, into these caverns, would introduce the pebbles and mud, and would also drift down, to the lowest recesses, the bones that lay perhaps more equally distributed than they do at present."

It is certain that, unless by miracle, the thing above supposed could not possibly take place. The rushing waters are supposed to introduce the "pebbles and mud" into this well; and this, through a chimney in the rock. The pebbles had to pass over eighty or a hundred feet, and over an obstruction besides. But the large hollow cave, through which they had to pass, is comparatively empty, while those more distant vaults are filled. manifest, therefore, that the weighty materials, as "mud, stones, and bones," which the water forced into this well, would have liberty to move, by the force of gravity, when they got into it; and that they would have subsided and sunk to the bottom, is a physical certainty; and the heaviest would have been lowest, unless the lowest parts were previously occupied; and then they would have wedged hard upon them. None of these natural results, however, have place. At the "top" as well as at the "bottom," "pebbles and bones occur," though nothing hinders them from sinking to the bottom of the water.-I would, therefore, observe, first, that from the universal laws of gravitation, it is physically impossible these mud, bones, and pebbles, could be thus separated, assorted, and suspended

by the "diluvial waters;" and, secondly, that the perfect consistency of all these phenomena with the usual appearances of modern occurrences in pits and caves, is strong evidence that they are of later epochs than that of the general deluge. I remain, &c.

GEORGE BUGG.

SECTARIAN PATOIS.

Tothe Editor of the Christian Observer.

I EARNESTLY wish that every minister of Christ would take your advice, to let his language be either plain English, or scriptural quotation. The patois which is modelled upon the two, without being either, is defective, not merely in good taste, but often in intelligibility. I am aware that it is sometimes defended on the ground of its being "more spiritual;" but spirituality consists not in words but in ideas and things. Many spiritually-minded men have adopted it; but they might have been equally spirituallyminded without it. But this system of altering our current phraseology is often practised where spiritual ideas are not in question. For example—one example out of a hundred:—"I improved Mr. A's death last Sunday." The speaker meant that he attempted to "improve" his own flock, and not Mr. A.'s death. There is no definition in any dictionary, or sentence in any simple English writer, which warrants such a use of the word " improve:" why then adopt a fashion of amalgamating the language, and using a phraseology obscure to some classes of hearers, and grievously offensive to others? And why must a clergyman, whose style does not happen to be modelled after this fashion, and who, perhaps, first became truly "spirituallyminded" at too late a period of life easily to adopt it, even if he had desired, be accounted deficient in spirituality because he is not, or does not wish to be, master of a sectarian shibboleth, which would disappear in a translation into any other language. The peculiar phraseology of Scripture is quite another matter: this can never be too prominent; and religion, like other arts and sciences, must have its technical language; but this does not justify the sort of patois to which I allude, and which is neither the word of God nor the current language of mankind.

A SIMPLICITARIAN.

CLERICAL INDECORUM.

Tothe Editor of the Christian Observer.

Being engaged, some time since, to preach at a church in London, I was not a little surprised at the clerk saying to me, "Perhaps, sir, as it is a cold morning, you would prefer sitting by the vestry fire till the prayers are over." On my expressing my sense of the impropriety of such a proposal, he seemed equally amazed on his part at my ignorance, and, by quoting examples in point, endeavoured to screen himselffrom the imputation of having suggested any thing at all irreverent or indecorous.

I have subsequently learned, that this practice, which my rustic notions must still compel me to consider as most unbecoming, prevails more generally than I had imagined, and even in some places where better things might be expected. Perhaps, therefore, it may not be inexpedient to remark, that whatever may be thought about the decency of the thing, its illegality is put beyond dispute by the following clause in the Act of Uniformity: " Be it further enacted by the authority aforesaid, That at all and every time and times, when any sermon or lecture is to be preached, the common prayers and service, appointed for that time of the day, shall be