

A
DISCOURSE
ON THE
STUDIES OF THE UNIVERSITY.

BY
ADAM SEDGWICK, M.A. F.R.S. &c.

WOODWARDIAN PROFESSOR
AND FELLOW OF TRINITY COLLEGE, CAMBRIDGE.

FOURTH EDITION.



CAMBRIDGE:
PRINTED AT THE PITT PRESS, BY JOHN SMITH,
PRINTER TO THE UNIVERSITY.
FOR J. & J. J. DEIGHTON, CAMBRIDGE,
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TO
THE MASTER,
FELLOWS AND STUDENTS
OF
TRINITY COLLEGE, CAMBRIDGE,
AND
ESPECIALLY TO THOSE AT WHOSE REQUEST
IT IS PUBLISHED,
THE FOLLOWING DISCOURSE
IS DEDICATED
BY THEIR AFFECTIONATE AND FAITHFUL SERVANT
THE AUTHOR.

1

P R E F A C E.

THE substance of the following Discourse was delivered in the Chapel of Trinity College, on the day of the annual Commemoration in December last, and is published at the request of the junior members of the Society, to whom it was more immediately addressed. As the long delay in its publication requires some apology, the Author begs leave to state, that the request, on which he is now acting, first reached him during the christmas vacation, when he was absent from the University; and that for some weeks after his return he was so much occupied in completing a course of lectures and in passing two memoirs through the press, that the Lent Term had nearly expired before he had time to revise his MS for the printer. Without any further delay it was then struck off as far as page 33; and he hoped to have published it at the commencement of the Easter Term.

During its progress through the press he found however that he had undertaken a more difficult task than he had imagined: for having animadverted with much freedom on some parts of the Cambridge course of reading, he felt himself com-

pelled, before he dared to give what he had written to the public, to enter at more length on a justification of his opinions. On this account, his remarks on the classical, metaphysical, and moral studies of the University (extending from p. 33 to p. 91) were cast over again, and expanded to at least three times their original length.

Before this part of his task was completed, an attack of indisposition compelled him for a short time to quit the University; and on his return the languor of ill health, and a series of engagements of which it is not necessary here to speak, prevented him from immediately resuming it: so that the latter part of this Discourse was not printed till a late period in the Easter Term, when most of the junior Members had left the University for the long vacation. On this account (as the Appendix was not written, and perhaps he ought to add, as the determination fell in with the ready excuses of a procrastinating spirit) he resolved not to publish before the University re-assembled in the October Term.

Lest he should be accused of printing a discourse too widely differing from the one he was requested to publish, he wishes to state, that (with the exception of mere verbal corrections) it is, as far as p. 33, in the form in which it was first written, and that the conclusion has undergone

no change: and in the two parts which have been so much expanded, he has preserved the scope and sentiments, and in many instances the very words, of his first sketch. The notes added in an Appendix are not written to serve any purpose of ostentation. By most academic persons they may be considered unnecessary: but should a single reader find them of use in explaining or enforcing what is stated in the text, the Author will not regret that he has written them.

He has attacked the utilitarian theory of morals, not merely because he thinks it founded on false reasoning, but because he also believes that it produces a degrading effect on the temper and conduct of those who adopt it. It is, however, more easy to pull down than to build up; and he thinks it unfortunate that there is no English work on morals at once unexceptionable in its principles, and cast in such a form as to meet the wants of the University. Bishop Butler's three Sermons on Human Nature and his Dissertation on the Nature of Virtue have lately become subjects of examination in Trinity College. Of their kind, they are works of inestimable value: but they are devoted rather to the discussion of the principles of morality than to the establishment of a system of moral philosophy; and they are considered by most persons, who begin to speculate on such questions, both difficult and uninviting.

Before concluding this Preface, the Author disclaims any notion of holding out the following pages as a formal dissertation on academic studies. Such an attempt would be far above his powers; not falling in with his usual habits of thought, and requiring research for which he has neither time nor inclination. What is here printed treats of subjects treated of a hundred times before, and professes no originality, except what it derives from the circumstances under which it was delivered and the persons to whom it was addressed. Should it be the means of leading even a small number of them to think more justly on any of the subjects of academic learning, and to combine moral and religious habits of thought with those severe physical studies, during which the best faculties of the mind are sometimes permitted to droop and wither, his most earnest wishes will be accomplished.

TRINITY COLLEGE, CAMBRIDGE,
Nov. 5, 1833.

PREFACE

TO THE

FOURTH EDITION.

THE Author has learnt from the Publishers (and he may add the Proprietors) of this "Discourse," that a fourth Edition of it is now struck off. Had he seen the sheets during their passage through the Press, he might, perhaps, have made a few verbal corrections of the text.

For many years it has been the habit of English writers, more especially those who have been trained at Cambridge, to apply the term *philosophy* only to those branches of exact science that are designated on the Continent by the name of *physics*. As this local use of a general term may lead to a misapprehension of the writer's intentions, it would be well if, in the following pages, the words *inductive philosophy*, and other like phrases, were accompanied with some word limiting their application to the exact physical sciences.

The Author, however, again disclaims the idea of publishing his Discourse as a formal Scientific Dissertation. It was delivered at a ceremonial, by which its matter and language were greatly modified: and the portions subsequently added to it partook necessarily of its original rhetorical form. His first object was to trace the connexion between physical science and natural theology. He then gave a short sketch of the other branches of study in the University of Cambridge, with a view of pointing out some imperfections of the course, and especially of those writings which are the guides of the Undergraduates in the metaphysical and moral sciences. In this part of his task he endeavoured to establish the reality of a moral sense, and the supremacy of conscience—following in these subjects opinions that have been maintained with great skill and power of reasoning by Butler; and advocated in later times by Stewart, Mackintosh, and Chalmers. Lastly, constrained by the place and occasion of its delivery, he endeavoured to connect the several parts of his Discourse together in such a way as to make the whole subservient to the

support of Christian truth. To these objects he exclusively adhered: nor did he think it right to encumber himself with the consideration of other matters, which, however important in themselves, or connected with the subjects he was handling, were utterly incompatible with the limits of a single address.

Nothing is more idle in controversy than for a man to cast on his opponents the blame of consequences he himself draws from a disputed principle. The Author does not believe that he has offended in this way: for in pointing out the evil consequences of the utilitarian theory of morals, he had in his mind facts notorious in the history of modern times, and base conclusions advocated in modern writings. But he was not so unreasonable as to impute such conclusions to all who adopt one side of a controverted moral question.

Several honest but unwise attacks have been made by one writer upon the passages of this Discourse relating to the discoveries of Geology. Had he made himself acquainted even with the simplest elements of the subject,

it might have been well to reply to him : but he is at present so far removed beyond the reach of any reasonable argument, that his writings must be passed over without further notice.

TRINITY COLLEGE, CAMBRIDGE,

June, 1835.

DISCOURSE,

&c.

 PSALM CXVI. 17, 18, 19.

I will offer to thee the sacrifice of thanksgiving, and will call upon the name of the Lord. I will pay my vows unto the Lord now in the presence of all his people, In the courts of the Lord's house, in the midst of thee, O Jerusalem. Praise ye the Lord.

How beautiful and how varied are the forms of praise and thanksgiving in the book of Psalms! They appear as the outpourings of a grateful heart before God for the glories of his creation—for succour in the hour of danger—for deliverance from affliction—for national privileges—and for anticipated salvation. There is an earnestness in many of them that lays hold upon our strongest sympathies: for (without speaking of their inspired and prophetic character) they may be truly said to spring from feelings which are natural to every man who is not utterly debased, and in the exercise of which generous tempers ever take delight. The words I have chosen are the conclusion of a Psalm composed by one who had been raised up from some great affliction—*his soul had been delivered from death, his eyes from tears, and his feet from falling.* I quote them however with no

reference to the purpose for which they were first uttered, but because they are well fitted for the occasion that brings us together—to *offer in the courts of the Lord's house the sacrifice of thanksgiving, and to call upon the name of the Lord.*

A well disciplined mind may perhaps learn to see every thing with an eye of faith, so as to find, in all the dispensations of Providence, a motive for the exercise of holiness. But many of us are, I fear, too little endowed with a spirit leading to a contemplation of God in the common bounties of his creation: our spiritual sluggishness requires something more exciting than sensations arising from large and general views of God's providence—something which comes immediately to our own hearts and bosoms, and seems to bear upon our personal happiness. When the body is weighed down by sickness, or the spirits sunk by present affliction, the glories of this world fade away before us; and we seek, or at least as christian men we ought to seek, our proper consolation in looking to that heavenly kingdom which suffers no change, and into which sorrow finds no entrance: and after the clouds lately gathered round us are passed away and we are conscious of a great deliverance, the feelings of our hearts (unless quite dead to religious sense) will burst forth in the language of praise and thanksgiving. In like manner, though perhaps in less degree, on the national anniversary, the religious festival, or the solemn commemoration, thoughts seemingly extinct within us will start into new life, and trains of association will arise, lifting our thoughts above the selfishness and sensuality of the world, and fixing them on our noblest destinies.

And let me here observe, that the fact of our receiving impressions like these (however interrupted, and by whatever means excited,) is an evidence that the spirit of religion is not dead within us. By the blessing of God, the spark now burning but dimly may be excited to a flame, which shall refine the corruptions of our hearts, and become the animating principle of our lives. On this account, every visitation tending to alienate our affections from the world ought to be considered as the warning voice of God addressed to ourselves, and not to be despised; and every solemnity of religion (whether public or private), having the power of touching the heart and acting on our better feelings, is to be regarded as a merciful invitation of God, and never to be rejected.

Sentiments such as these are surely fitted for the occasion on which we meet; to return thanks to God for the mercies he has vouchsafed to us—to recount the names of those pious benefactors to whom we owe the peaceful abode of learning and science wherein we dwell—to place before the mind's eye those illustrious men who have inhabited this our Zion, and obtained for themselves a name imperishable as the records of our race. These men are to us in the place of a glorious ancestry, urging us by their example to an emulation of their deeds; and we are unworthy sons if we turn a deaf ear to that voice by which they still seem to speak to us.

Among them were found many to join the foremost rank of those who in ancient times emancipated this country from spiritual bondage; to partake in the great work of translating the records of our faith into our native tongue, and to put

forth their whole intellectual strength in diffusing the light of Christian truth among the people. In their lists we read the name of Bacon, who, gifted almost with prophetic spirit, was enabled to climb the Pisgah of science, and point out the land of promise to those who were to follow him—of Newton, who after having achieved, by his single arm, the conquest of the natural world, was not puffed up, but gave God the glory; combining, with powers which never fell to the share of any other man, the simplicity of a child, and the humility of a Christian—of Ray, who saw the finger of God in the whole frame-work of animated nature, and within these sacred walls taught the listeners to comprehend the meaning of those characters he himself had first interpreted—of Barrow, the learned and the wise, the inventive philosopher, the manly reasoner, the eloquent and single-minded christian moralist—and of many other illustrious men, whose very names time would fail me to tell, who having had their minds braced by the studies of this place, and their hearts sanctified by the wisdom from above, devoted themselves to the high and holy office of extending the empire of truth.

And surely the happiness we enjoy, and the names we this day commemorate, require something more from us than the gratitude of the lips—something more than a formal and heartless ceremonial. We are here met at our annual celebration where these mighty men have met before; we are worshipping at the altar where they worshipped, we are treading on their ashes, and looking on their tombs, and every thing around us is sanctified by their genius.

Circumstances like these have ever exerted a powerful influence on generous natures. If heathen

men have felt them, and made them the topics of exhortation and the mainsprings of national honour, how much more ought they to affect us who are assembled as a christian brotherhood. We believe that the glorious names we commemorate are not those of men who have perished without hope; but that having fought the good fight in this life, they have received a crown of glory in that which is to come. They seem to speak to us from their tombs, but with no earthly voice, encouraging us by their example, and telling us to be firm and of good cheer in this our pilgrimage—that beyond the dark portal to which we all are hurrying there is a land of promise—and that treading in the steps where they have trodden, and guided by the heavenly hand which guided them, we ourselves may reach that land and dwell with them in everlasting glory.

The influence of domestic example is I think to be recognized in the institutions of every nation. In all of them, under some form or other, we find the traces of hereditary rank and of transmitted authority: and in infant societies, those institutions did not, I believe, commence in assumed physical superiority, but rather in the experience of moral fitness.

It is not wise for us too nicely to canvass the decrees of Omnipotence: some of them we can partially comprehend—some of them must ever remain hidden from our sight. We are however justified in saying that, in the moral, as in the physical world, God seems to govern by general laws: and when he declares to us, that he will visit the sins of the fathers on their children; and that he will have mercy on thousands in them that love him and obey him; we hear not a new and despotic

annunciation contrary to the ordinary operations of his moral government ; but rather we hear a formal promulgation and a higher sanction of them. It is true as a matter of fact, that some races and kindreds are favoured above the rest of men—that God shews mercy to them in thousands, spreading among them the light of truth, and exalting them above the other nations of the earth. But these temporal blessings, I repeat, are not violations, but examples of the moral government of God ; for in the nature of things they only co-exist with the exercise of those moral and intellectual qualities which bind men and families together, and form the very sinews of national strength. When the lessons and the examples of virtue fail, the nation's strength fails with them ; the voice of eloquence and the maxims of wisdom are no longer heard within its walls, and its proudest monuments soon moulder into the dust ; or if they remain at all, are visited in after times as mighty ruins, serving only to contrast its former glory with its present desolation.

It is then our bounden duty to reflect, that our sentiments and our conduct do not terminate with ourselves. Every man, however humble his station and feeble his powers, exercises some influence on those who are about him for good or for evil : and these influences emanating again as from a fresh center, are propagated onwards—and though diluted by new motives, and modified by new circumstances at each transmission, so as in common cases to be lost to the eye of man, they may still go on producing a silent effect to the remotest generations ; and thus become, under Providence, a part of the appointed means by

which a nation's glory is continued, and its strength upheld.

What I have said of nations, is true also of families or households like our own. If we have received a goodly inheritance we ought to transmit it unimpaired to our children. It matters not to us that the light of truth has been shed abroad by those who have gone before us, if we be living in intellectual darkness. It is not our honour, but our shame, that the wise and good have dwelt within these walls, if they have now no living representatives. Self-examination is therefore among the most important duties of this solemnity: nor is it to be a mere idle and inoperative retrospect, but must be followed by prayer against intellectual pride and presumptuous sins—prayer for support in those resolves of which our consciences approve—prayer above all for that spirit which will lift us above the temptations of the world. If we be endowed with this temper, we bring a hallowed offering to the altar, and cannot doubt that the incense of our praise will mount up to the throne of grace, and bring down a blessing on our household.

By the arrangements of Providence, things which to us seem good and evil are so blended in this life, that in the annual celebration of societies like our own, we are seldom permitted to meet with feelings of unmixed joy. In thinking of the past glories of our body and of the mighty minds by which its animation has been continued, it is impossible for any one who has dwelt within its walls but a few short years, not to be struck with the changes in its moral aspect—not to be reminded of early prospects blighted, of the links of friendship severed—not to have impressed upon

his memory, that hearts but as yesterday warm with kindness, and tongues glowing with the accents of genius, are now cold and inanimate. The song of praise and the voice of thanksgiving ought therefore to be heard as notes of preparation; telling us that this is not our abiding city—that with all the good things it contains, and the goodly recollections belonging to it, it is but a halting-place in the great pilgrimage of life—and that before another returning festival, the names of some of us may be also written on the long scroll of those who are departed.

These, my brethren, seem to be sentiments not merely fitted for the occasion on which we meet, but such as must force themselves on every serious and reflecting mind. I must however content myself with this short allusion to them, as the time does not allow me to dwell on them any farther.

Leaving then these general topics, I proceed to speak of this as a place of sound learning and christian education, and to inquire what ought to be the conduct of the understanding during the course of our academic studies before we enter on the great theatre of life. What I am now saying, though I hope not altogether unfitting to other ears, is chiefly addressed to the younger members of our household.

In the first place, let me put before you a law and condition of your being, of great influence in the formation of your characters. Impressions independent of the will, whether produced directly through the senses, or by trains of association within the mind, gradually lose their power by repetition; but habits, whether of mind or body

depending on a previous determination of the will, gain strength by their very exercise, so as at length to become a part of ourselves and an element of our happiness. It is to the operation of this law that we must refer some of the strangest contradictions in human nature. What a melancholy contrast we too often find between the generous temper of youth, and the cold calculating spirit of a later period! between the actions of a man at one time of his life and those of another! I believe there is not one whom I am now addressing, who, if he reflect at all, will not acknowledge how much the cold hand of time has already chilled some of his better feelings. Now it is absolutely certain, that sensuality and other sins to which by nature man is prone, will do their work in marring the image of God; and, unless opposed by some countervailing principle, will end in habits making a wreck both of soul and body. In such a state of things a man becomes utterly spell-bound—he is in *the gall of bitterness and the bonds of iniquity*, and has no power to help himself; and the hand of God alone can help him.

I am not now contending for the doctrine of moral necessity; but I do affirm that the moral government of God is by general laws; and that it is our bounden duty to study those laws, and as far as we can to turn them to our account. As far, at least, as this world is concerned, the feelings on which we act in early life may and do diminish in their intensity, and yet we may go on in a course, honourable to ourselves and useful to our country, mainly by what is called the force of habit. Of what vast importance is it then, to those I am now addressing, many of whom have barely

reached the dawn of manhood, to lay a good foundation against the coming time, by fostering habits of practical kindness, and self-control—by mental discipline and study—by cultivating all those qualities which give elevation to the moral and intellectual character—in one word, by not wavering between right and wrong, but by learning the great lesson of acting strenuously and unhesitatingly on the light of conscience.

The studies of this place, as far as they relate to mere human learning, divide themselves into three branches.

1st. The study of the laws of nature, comprehending all parts of inductive philosophy.

2dly. The study of ancient literature—or in other words, of those authentic records which convey to us an account of the feelings, the sentiments, and the actions, of men prominent in the history of the most famous empires of the ancient world. In these works we seek for examples and maxims of prudence and models of taste.

3dly. The study of ourselves, considered as individuals and as social beings. Under this head are included ethics, and metaphysics, moral and political philosophy, and some other kindred subjects of great complexity, hardly touched on in our academic system, and to be followed out in the more mature labours of after life. Our duty here is to secure a good foundation on which to build; and to this end we must inquire what ought to be the conduct of the mind in entering on any of these great provinces of human learning.

I. A study of the laws of nature for many years has been, and I hope ever will be, held up to

honour in this venerable seat of the discoveries of Newton. But in this, as in every other field of labour, no man can put aside the curse pronounced on him—that by the sweat of his brow he shall reap his harvest. Before he can reach that elevation from whence he may look down upon and comprehend the mysteries of the natural world, his way is steep and toilsome, and he must read the records of creation in a strange, and to many minds, a repulsive language, which, rejecting both the sense and the imagination, speaks only to the understanding. But when this language is once learnt, it becomes a mighty instrument of thought, teaching us to link together the phenomena of past and future times; and gives the mind a domination over many parts of the material world, by teaching it to comprehend the laws by which the actions of material things are governed. To follow in this track, first trodden by the immortal Newton—to study this language of pure unmixed truth, is to be regarded not only as your duty, but your high privilege. It is no servile task, no ungenerous labour. The laws by which God has thought good to govern the universe are surely subjects of lofty contemplation; and the study of that symbolical language by which alone these laws can be fully deciphered, is well deserving of your noblest efforts. Studies of this kind not merely contain their own intellectual reward, but give the mind a habit of abstraction, most difficult to acquire by ordinary means, and a power of concentration of inestimable value in the business of life. Were there any doubt of this, I would appeal to modern examples, and point out a long list of illustrious men, who, after being strengthened by our severe studies and trained in our discipline, have

borne off the prize in the intellectual conflicts of their country. But I need not attempt to prove what no one is prepared to deny.

Are there, however, no other consequences of these studies beyond those I have pointed to? The moral capacities of man must not be left out of account in any part of intellectual discipline. Now these severe studies are on the whole favourable to self-control: for, without fastening on the mind through the passions and the senses, they give it not merely a power of concentration, but save it from the languor and misery arising from vacuity of thought—the origin of perhaps half the vices of our nature.

Again, the study of the higher sciences is well suited to keep down a spirit of arrogance and intellectual pride: for, in disentangling the phenomena of the material world, we encounter things which hourly tell us of the feebleness of our powers, and material combinations so infinitely beyond the reach of any intellectual analysis as to convince us at once of the narrow limitation of our faculties. In the power of grasping abstract truth, and in the power of linking together remote truths by chains of abstract reasoning, we *may* be distinguished from the lower orders of the beings placed around us; but, in the exercise of these powers, we bear perhaps no resemblance whatsoever to the supreme intellect. Applied to an Almighty Being with the attribute of ubiquity, in whose mind all things past and to come co-exist in eternal presence, time and space have no meaning, at least in that sense in which they are conditions of our own thoughts and actions. To him all truth is as by intuition; by us truth is only apprehended through the slow and toilsome process

of comparison. So that the powers and capacities, forming the very implements of our strength, are also the indications of our weakness. In some of our capacities, we may perhaps exhibit a faint shadow of a portion of our Maker's image; but in the reasoning power, of which we sometimes vainly boast, we bear to him, I believe, no resemblance whatsoever.

Simplicity of character, humility, and love of truth, ought therefore to be (and I believe generally have been) among the attributes of minds well trained in philosophy. After all that has been done since the thoughts of man were first turned to the phenomena of the material world—after all the boasted discoveries of science, from the first records of civilization, down to our own days—those glorious passages of the Old Testament, contrasting the power and wisdom of God in the wonders of his creation, with man's impotence and ignorance, have still, and ever will continue to have, not merely a figurative or poetical, but a literal application. *Gird up now thy loins like a man: for I will demand of thee, and answer thou me*. Where wast thou when I laid the foundations of the earth? declare, if thou hast understanding...Whereupon are the foundations thereof fastened? or who laid the corner-stone thereof; when the morning-stars sang together, and all the sons of God shouted for joy? Or who shut up the sea with doors, when it brake forth, as if it had issued out of the womb? When I made the cloud the garment thereof, and thick darkness a swaddling band for it...and said, Hitherto shalt thou come, but no further: and here shall thy proud waves be stayed?...Where is the*

* Job, chap. xxxviii.

way where light dwelleth? and as for darkness, where is the place thereof?...Knowest thou it, because thou wast then born? or because the number of thy days is great?

Before such an interrogator, we can only bow in humble adoration. The study of the laws of nature may strengthen and exalt the intellectual powers: but strange must be our condition of self-government and tortuous our habits of thought, if such studies be allowed to co-exist with self-love and arrogance and intellectual pride.

A study of the Newtonian philosophy, as affecting our moral powers and capacities (the subject I am now pressing on your thoughts), does not terminate in mere negations. It teaches us to see the finger of God in all things animate and inanimate, and gives us an exalted conception of his attributes, placing before us the clearest proof of their reality; and so prepares, or ought to prepare, the mind for the reception of that higher illumination, which brings the rebellious faculties into obedience to the divine will.

We learn, by experiment, the different actions and relations of the material things around us, and we find them bound together by a law of mutual attraction. Following our master of philosophy in the loftiest generalization recorded in the history of mankind, we attribute this property, found in the matter on the surface of our planet, to every other mass of matter within the limits of the visible universe. We bring our generalization to the test of observations of a new and certain kind, and we find that it is true. We find that no parts of the visible universe are insulated from the rest; but that all are knit together by the operation of a

common law. We follow this law into its remotest consequences, and we find it terminating in beauty, and harmony, and order*.

Again, if we commence our examination of the natural world with the small portions of matter which surround us, and following our induction in a new direction, resolve them into their elements, and unravel the laws of their combination; we see at every step new cause for wonder—new objects for admiration. Every portion of the matter we tread beneath our feet (however insignificant as an object of sense) propagates its influence through all space, and is felt in the remotest regions of the universe. However small the particle of dust we trample on, it may present traces of a mechanism subservient to the complicated functions of a living being; or it may be a compound inorganic body, possessing properties of indefinite complexity: and though it be what we call a simple substance, still it is held together by its own laws of cohesion; it is composed of elements not brought together fortuitously, but in obedience to a fixed law, by which they are congregated in definite proportions, and grouped in symmetry and order. Not only is every portion of matter governed by its own laws, but its powers of action on other material things are governed also by laws subordinate to those by which its parts are held together. So that in the countless changes of material things and their countless actions on each other, we find no effect which jars with the mechanism of nature; but all are the harmonious results of dominant laws.

Again, if we pass from the consideration of things visible and tangible to the subtile and

* See Note (A) at the end.

imponderable agents of the material world, we not only witness the manifestation of their powers in every physical change and every combination ; but we know that some of them, and we may perhaps suppose that all of them, are diffused uninterruptedly through every portion of the universe. We are certain that the material of light is at least as far extended as the force of gravitation. It places us at once in physical contact with the remotest bodies of our created system, and by its vibrations they become manifest to us through our visual sense. There is, therefore, no portion of space, however small or however distant, which is not filled at all times with subtile matter—which does not every moment transmit material influences, in number, complexity and rapidity beyond the grasp of thought, yet never anomalous or fortuitous, but governed by fixed laws, and subservient to ends most important in the economy of nature, and essential to the very existence of sentient beings.

In speaking of the laws of nature and of the harmonious changes resulting from their action, in spite of ourselves we fall into language in which we describe the operations of intelligence : and language, let me observe, was never formed by a convention of learned men, or constructed on the scheme of an hypothesis. It is the true offspring of our intellectual nature, and bears the image of such ideas as rise up of necessity in the mind, from our relation to the things around us. If we forget him in our thoughts, with our lips at least we must do homage to the God of nature. What are the laws of nature but the manifestations of his wisdom ? What are material actions but manifestations of his power ? Indications of his wisdom and his power

co-exist with every portion of the universe. 'They are seen in the great luminaries of heaven—they are seen in the dead matter whereon we trample—they are found in all parts of space, remote as well as near, which we in our ignorance sometimes regard as mere vacuities—they are unceasing—they are unchangeable*.

Contemplations such as these lift the soul to a perception of some of the attributes of God ; imperfect it may be, but still suited to the condition of our being. But are thoughts like these to pass through the mind and produce only a cold acquiescence? Are we to dwell in the perpetual presence of God and yet dishonour him by the worship of ourselves, and refuse to him the homage of our humble praise? Such were not the feelings of the holy Psalmist, when, contrasting his own feebleness with the all-pervading wisdom and power of God, he was kindled as by fire from heaven, and burst out into rapturous expressions of adoration. *Whither shall I go from thy spirit? or whither shall I flee from thy presence? If I ascend up into heaven, thou art there: if I make my bed in hell, behold, thou art there. If I take the wings of the morning, and dwell in the uttermost parts of the sea; even there shall thy hand lead me, and thy right hand shall hold me. If I say, Surely the darkness shall cover me; even the night shall be light about me. Yea, the darkness hideth not from thee: but the night shineth as the day: the darkness and the light are both alike to thee †.*

How any believer can deny the reality of a natural religion when he reads those passages in the Bible where its power is so emphatically ac-

* See Note (B) at the end.

† Psalm cxxxix. 7—12.

known, is more than I can understand. We are told by St Paul, that even the Gentiles are without excuse, *for the invisible things of God from the creation of the world are clearly seen, being understood by the things which are made, even his eternal power and Godhead**. Yet I have myself heard it asserted within these very walls, that there is no religion of nature, and that we have no knowledge of the attributes of God or even of his existence, independently of revelation. The assertion is, I think, mischievous, because I believe it untrue: and by truth only can a God of truth be honoured, and the cause of true religion be served.

But there is another class of objectors, who not only adopt this cold and unnatural conclusion, but rejecting revelation along with it, banish utterly all thought of God from the world. It is indeed true, as these objectors state, that all material changes are governed by fixed laws, and that the present condition of all material things is but a natural consequence of these laws operating on that condition of matter which preceded the phenomena we contemplate. They rest their strength, as far as I understand their meaning, in this immutability of the laws of nature: and having, with much labour, decyphered a portion of these laws, and having traced the ordained movements of the material world without ever thinking of the Being by whom these movements were directed, they come at length to deify the elements themselves, and to thrust the God of nature from his throne. But where is the reasonableness of this conclusion? The unchangeableness of the laws of nature is not only essential to the well being, but to the very existence of crea-

* Rom. i. 23.

tures like ourselves. The works of our hands are liable to perpetual change, from caprice, from violence, or from natural decay : but in the material laws ordained by God, there are no such indications, because they partake of the perfections of his attributes, and are therefore unchangeable.

The single-minded writers of the New Testament, having their souls filled with other truths, thought little of the laws of nature : but they tell us of the immutable perfections of our heavenly Father, and describe him as a being in *whom is no variableness or shadow of turning*. The religion of nature and the religion of the Bible are therefore in beautiful accordance ; and the indications of the Godhead, offered by the one, are well fitted to give us a livelier belief in the promises of the other. So far from offering any foundation for an atheistical argument, the constancy of the laws of nature, might, I think, have been almost anticipated by a well ordered mind, though unacquainted with the great discoveries of physics : and should the framer of the universe have other changes in reserve for the material world beyond those that follow from the laws by which he has already in part revealed himself to us, we have no right to suppose that such changes can be known or understood by beings like ourselves—so feeble in capacity—so limited in time—and confined to such a speck of the universe.

But after all, we do contemplate something more than a mere succession of material changes. We find that these changes are limited by an adjusting power, and tend to a condition of equilibrium, and that the ultimate results of the laws of nature are harmony and order. We find them operating in

different portions of space with endless complexity, and yet producing effects perfectly adapted to each other. We see innumerable portions of matter not only obeying laws common to all matter, but acted on by new laws subservient to vital powers ; and by these laws gradually moulded into a beautiful form and mechanism—suited at once to all the complicated functions of a sentient being, and to all the material elements which surround it. Are we to believe that there can be such beautiful and harmonious movements in the vast mechanism of nature, and yet think that the Spirit of God hath not brooded over them, and that his hand hath not guided them? Can we see in every portion of the visible world the impress of wisdom and power, and yet believe that these things were not foreseen in the Divine mind, and these ends not contemplated before he called the universe into being?

The external world proves to us the being of a God in two ways ; by addressing the imagination, and by informing the reason. It speaks to our imaginative and poetic feelings, and they are as much a part of ourselves as our limbs and our organs of sense. Music has no charms for the deaf, nor has painting for the blind ; and all the touching sentiments and splendid imagery borrowed by the poet from the world without, would lose their magic power, and might as well be presented to a cold statue as to a man, were there no pre-ordained harmony between his mind and the material things around him. It is certain that the glories of the external world are so fitted to our imaginative powers as to give them a perception of the Godhead, and a glimpse of his attributes ; and this adaptation is a proof of the existence of God, of

the same kind (but of greater or less power according to the constitution of our individual minds) with that we derive from the adaptation of our senses to the constitution of the material world.

*The heavens declare the glory of God, and the firmament sheweth his handy work**. Here is a direct assertion—an appeal to the heart and not to the understanding; and every unsophisticated heart will beat in unison with it. *The fool hath said in his heart, There is no God: corrupt are they and have done abominable iniquity†*. In this passage the denial of God is coupled in the mind of the sacred poet with foul and sensual sin. And is not such a union justified by experience? A soul corroded by sensual sin can ill reflect the pure image of God—can ill discern the indications of his will in the glories of his creation.

Leaving, however, the proofs of an intelligent cause from the connexion between the external world and our imaginative powers, let us once more glance our eye over the proofs which appeal to the reasoning faculties. The mind becomes bewildered among the countless movements continually going on, and the perpetual changes produced by material actions, of which we see neither the beginning nor the end: but we find repose in the study of animated nature. Every being possessing life may first be considered apart from the rest of nature. Its bodily organs are produced by powers of vast complexity and understood only in their effects—confined in their operation to the individual being, and entirely separate from the ordinary modes of atomic action. Yet these organs thus elaborated, exhibit throughout a perfect mechanism, in all its

* Psalm xix. 1.

† Psalm Liii. 1.

parts (as far as we can comprehend them) exactly fitted to the vital functions of the being. Contrivance proves design: in every organic being we survey (and how countless are the forms and functions of such beings!) we see a new instance of contrivance and a new manifestation of an intelligent superintending power.

This proof is so strong that it never has been and never can be gainsaid. It is in vain that we attempt to shut out the belief in an intelligent Creator by referring all phenomena to a connected succession of material causes, not one of which is fully comprehended. This thought should indeed fill us with deep humility, but takes not from us the fair inductions of our reason. We do not understand that complicated material action by which the God of nature builds up the organic structure of a sentient being: but we do, in part at least, comprehend the adaptation of its mechanism to various ends, and we see those ends accomplished: and this enough to warrant our conclusion.

An uninstructed man sees a piece of mechanism, and from the form and the acting of its external parts (though he comprehend neither its whole structure nor its objects) is certain that it is the work of a skilful hand. Another man understands all its complicated movements, but knows not the nature of the moving power in which they originate. A third can explain the alternate expansions and condensations of an elastic vapour, and point out this action as the origin and support of the whole propelling force. At length we find one, who will not only explain the whole mechanism from first to last; but tell us of the nature of its materials, of the places whence they were de-

rived, of the modes of their fabrication, of the manner in which they were put together, and of all the effects of their combined action. But it is not necessary to know all this to be certain of an intelligent contriver. The first observer drew this conclusion rightly from what he saw, though he comprehended little of these complicated movements. And after all, what relation does the most skilful mechanist bear to his own workmanship? He does not create one particle of matter—he does not supersede one law of nature: but using the matter created to his hands, and forming and combining it in subordination to the laws impressed on it, he produces a connected succession of material actions, and obtains a series of results—foreseen in his own mind and determined in his will before he commenced the building of his fabric.

Something like this we can trace in the developement of organic beings. They are formed of matter, which was created, and governed by its own laws, anterior to their existence: they are matured by a regulated succession of material actions: when perfected, they exhibit an exquisite combination of mechanical contrivances, and organs fitted to carry them into effect. To such a structure are superadded vital functions and appetencies, which (like the moving force of a complicated engine) put all its parts into motion, and compel them to obey the laws of their destination. The external forms of organic bodies we can study, their functions we can observe, their internal mechanism we can partly trace: but when we consider the vital powers connected with their origin and development, we find ourselves among phenomena out of

the ken of our senses, and removed beyond our intellectual grasp; and are compelled to acknowledge our utter ignorance. But, on this account to exclude an intelligent contriver, would not be more wise, than for a man to assert the fortuitous concourse of the wheels of a machine, because he knew not the power by which it was set in motion.

It is in vain that we attempt to banish an intelligent Creator, by referring all changes organic and inorganic, to a succession of constant material actions, continued during an eternity of past time. Were this true, it would not touch our argument: and every clear instance of organic contrivance or material adaptation, would be a phenomenon unexplained, except on the supposition of a contriver. It would only prove that, in a certain portion of space, God had thought fit to give a constant manifestation of his wisdom and power through an indefinite period of duration. The eternity of material forms is, however, but a dream of false philosophy, unfounded in reason or analogy; and, as far at least as organic nature is concerned, contradicted by the plainest physical records of the past world.

Assuming, then, that the structure of every being, endowed with life, demonstrates the existence of an intelligent overruling power, to what more does the conclusion lead us?—To the inevitable belief that all inanimate nature is also the production of the same overruling intelligence. As all parts of matter are bound together by fixed and immutable laws; so all parts of organic nature are bound to the rest of the universe, by the relations of their organs to the world without them. If the beautiful structure of organic bodies proves

design, still more impressive is the proof, when we mark the adaptation of their organs to the condition of the material world. By this adaptation, we link together all nature, animate and inanimate, and prove it to be one harmonious whole, produced by one dominant intelligence.

The organs of sense and the materials around them are related to each other in the way of adaptation, but not in the way of cause and effect. The eye is not formed by the vibrations of light, nor the ear by the pulsations of the air. Had this been the case, such beings as the blind and the deaf would never have been heard of; for no being can be removed from the influence of those elements. The eye and the ear are formed in the womb by the mysterious operations of organic secretion and assimilation, before the pulsations of the air have ever reached the ear, or the vibrations of light have ever acted on the visual sense. They are examples of beautiful mechanism demonstrating design; but they are adapted only to a future condition of the being; and so also demonstrate a provident intelligence. Should any one deny conclusions such as these, I can only reply that his mind is differently constituted from my own, and that we have no common ground on which to build a reasonable argument.

By the discoveries of a new science (the very name of which has been but a few years engrafted on our language), we learn that the manifestations of God's power on the earth have not been limited to the few thousand years of man's existence. The Geologist tells us, by the clearest interpretation of the phenomena which his labours have brought to light, that our globe has been subject to vast

physical revolutions. He counts his time not by celestial cycles, but by an index he has found in the solid framework of the globe itself. He sees a long succession of monuments each of which may have required a thousand ages for its elaboration. He arranges them in chronological order ; observes on them the marks of skill and wisdom, and finds within them the tombs of the ancient inhabitants of the earth. He finds strange and unlooked-for changes in the forms and fashions of organic life during each of the long periods he thus contemplates. He traces these changes backwards through each successive era, till he reaches a time when the monuments lose all symmetry, and the types of organic life are no longer seen. He has then entered on the dark age of nature's history ; and he closes the old chapter of her records.—This account has so much of what is exactly true, that it hardly deserves the name of figurative description.

Geology, like every other science when well interpreted, lends its aid to natural religion. It tells us, out of its own records, that man has been but a few years a dweller on the earth ; for the traces of himself and of his works are confined to the last monuments of its history. Independently of every written testimony, we therefore believe that man, with all his powers and appetencies, his marvellous structure and his fitness for the world around him, was called into being within a few thousand years of the days in which we live—not by a transmutation of species, (a theory no better than a phrensied dream), but by a provident contriving power. And thus we at once remove a stumbling block, thrown in our way by those who would rid themselves of a prescient first

cause, by trying to resolve all phenomena into a succession of constant material actions, ascending into an eternity of past time.

But this is not the only way in which Geology gives its aid to natural religion. It proves that a pervading intelligent principle has manifested its power during times long anterior to the records of our existence. It adds to the great cumulative argument derived from the forms of animated nature, by shewing us new and unlooked-for instances of organic structure adjusted to an end, and that end accomplished. It tells us that God has not created the world and left it to itself, remaining ever after a quiescent spectator of his own work : for it puts before our eyes the certain proofs, that during successive periods there have been, not only great changes in the external conditions of the earth, but corresponding changes in organic life ; and that in every such instance of change, the new organs, as far as we can comprehend their use, were exactly suited to the functions of the beings they were given to. It shews intelligent power not only contriving means adapted to an end : but at many successive times contriving a change of mechanism adapted to a change of external conditions ; and thus affords a proof, peculiarly its own, that the great first cause continues a provident and active intelligence.

I forbear to dwell on other questions deeply connected with this science—Proofs of a higher temperature, as shewn by the organic forms of the old world—indications of the same thing, in the crystalline structure of the lower strata, and the masses on which they rest—and further proofs derived from the figure of the earth itself. The

spheroidal form of the earth seems to have preceded all geological phenomena, and makes probable the condition of primeval fusion : and, following in the same train of thought, we have only to imagine another accession of heat, and the whole earth must have been dissipated through planetary space, and have appeared (were there then an eye like our own to behold it) as a mere expanded nebulosity.

Speculations like these, starting at least from actual phenomena, are not without their use. For, without lowering one jot the proof of a pre-ordaining intelligence, they point, through a long succession of material changes, towards a beginning of things, when there was not one material quality fitted to act on senses like our own ; and thus they take from nature that aspect of unchangeableness and stern necessity which has driven some men to downright atheism, and others to reject all natural religion.

If, then, our planetary system was gradually evolved from a primeval condition of matter, we may well believe, that every material change within it, from first to last, has been but a manifestation of the Godhead, and an emanation from his immediate will—Or we may suppose, that new powers have, by an act of creative interference, been impressed on it at successive epochs of its changes ; and that these new powers, working together with the old, *may* have brought about the next system of material conditions*—Or, if it be thought more in conformity with what we see of the modes of

* This second hypothesis (though perhaps less philosophical than either of the other two) is suggested by the analogy of the repeated changes of organic species, alluded to above, each of which can be regarded only as a positive creative interference.

material action, to suppose that the primeval system contained within itself the elements of every subsequent change, then is the primeval matter to the matured system of the world, as the seed to the plant, or the egg to the living creature. Following for a moment the last of these hypotheses—shall this embryo of the material world contain within itself the germ of all the beauty and harmony, the stupendous movements and exquisite adaptations of our system—the entanglement of phenomena, held together by complicated laws, but mutually adjusted so as to work together to a common end—and the relation of all these things to the functions of beings possessing countless superadded powers, bound up with life and volition? And shall we then satisfy ourselves, by telling of laws of atomic action, of mechanical movements, and chemical combinations; and dare to think, that in so doing, we have made one step towards an explanation of the workmanship of the God of nature? So far from ridding ourselves, by our hypothesis, of the necessity of an intelligent first cause, we give that necessity a new concentration, by making every material power, manifested since the creation of matter, to have emanated from God's bosom by a single act of omnipotent prescience.

Leaving, however, these subjects of lofty speculation, and retracing our steps from the first condition of created matter towards the order of things now going on before us, we see, from the form and structure of the solid masses on the surface of the earth, that many parts of it have been elaborated during successive periods of time; and if we cannot point out the first traces of organic life, we can find, at least, an indication of its

beginning. During the evolution of countless succeeding ages, mechanical and chemical laws seem to have undergone no change; but tribes of sentient beings were created, and lived their time upon the earth. At succeeding epochs, new tribes of beings were called into existence, not merely as the progeny of those that had appeared before them, but as new and living proofs of creative interference: and though formed on the same plan, and bearing the same marks of wise contrivance, oftentimes as unlike those creatures which preceded them, as if they had been matured in a different portion of the universe and cast upon the earth by the collision of another planet. At length, within a few thousand years of the days in which we live (a period short indeed if measured by the physical monuments of time past), man and his fellow beings are placed upon the earth. Of the whole creation, he alone has an appetite for abstract truth—he alone sees material powers, and by the capacity of his mind grasps at them, not as accidents, but phenomena under some ruling law—and, in describing them, he uses language (and what is language but the connected natural signs of internal thoughts?) in which, in spite of himself, he describes the operations of intelligence and power. He turns these laws to his own account; by his own volition works upon them, and produces consequences important to himself and foreseen in his own mind: and thus he learns, from what he has done himself, and from the constitution of his intellectual nature, to see in all things around him contrivance and causation. All nature is but the manifestation of a supreme intelligence, and to no being but him to whom is given the faculty of reason, can this truth be

known. By this faculty he becomes the lord of created beings, and finds all matter, organic and inorganic, subservient to his happiness, and working together for his good. A part of what is past he can comprehend; something even of the future he can anticipate; and on whatever side he looks, he sees proofs, not of wisdom and power only, but of goodness.

But these abstract powers form not the whole immaterial part of man. He has moral powers and capacities unsatisfied with what he sees around him. He longs for a higher and more enduring intellectual fruition—a nearer approach to the God of nature: and seeing that every material organ, as well as every vital function and capacity in things around him, is created for an end, he cannot believe that a God of power and goodness will deceive him; and on these attributes he builds his hopes of continued being, and future glory.

This is the true end to which the religion of nature points. Her light may be but dim, and beyond the point to which she leads us there may be *a way which the vulture's eye hath not seen, the lion's whelp hath not trodden, nor the fierce lion passed*—a cold and dismal region, where our eyes behold none but the appalling forms of nature's dissolution: but here our heavenly Father deserts us not; he lights a new lamp for our feet, and places a staff in our hands, on which we may lean securely *through the valley of the shadow of death*, and reach and dwell in a land where death and darkness have heard the doom of everlasting banishment.

In ending this portion of my discourse, let me exhort you not only to mingle thoughts like these

with your abstract studies, but to give them an habitual personal application—to seek above all things a spirit of single-mindedness and humility—to believe yourselves in the perpetual presence of God—to adore him in the glories of his creation—to see his power and wisdom in the harmony of the world—his goodness and his providence in the wonderful structure of living beings—Not merely to admit these things as general truths, but to make yourselves familiar with them by frequent trains of reasoning founded on such examples as are continually before you*.

To deny all natural religion is not more strange than to commence a system of moral philosophy by denying the existence of moral feelings. It is, I think, to deny that very constitution of our minds on which the fabric of our religious character must be built. How such a character is matured and upheld I do not now inquire: but among persons of intellectual habits, it depends for its commencement, mainly on the conduct of the mind in early life: and during the changes of advancing years cannot perhaps be so well upheld by any ordinary means as by a steady habit of seeing, and adoring with thankfulness of heart, the wisdom and goodness of God in the wonders and bounties of his creation. The materials for thoughts like these are placed abundantly around us.

To many minds, the forms of natural knowledge, presented in the abstractions of severe science, are cold and uninviting: but if we follow them with the light of other kindred studies, such as those I have endeavoured faintly to shadow out, we bring

* See Note (C) at the end.

down the fire from heaven which at once gives them movement and animation.

II. In the comments I think it right to make on the second branch of our studies, I may take for granted that every one of those whom I now address, has from his tender years been taught the languages of Greece and Rome, and is familiar with at least a portion of their literature. It is no part of my object either to praise or blame the system of early education in this country: but, before I pass on, I may recall to your minds the wonderful ease with which a child comprehends the conventional signs of thought formed between man and man—not only learns the meaning of words descriptive of visible things; but understands, by a kind of rational instinct, the meaning of abstract terms, without ever thinking of the faculty by which he comes to separate them from the names of mere objects of sense. The readiness with which a child acquires a language may well be called a rational instinct: for during the time that his knowledge is built up, and that he learns to handle the implements of thought, he knows no more of what passes within himself, than he does of the structure of the eye, or of the properties of light, while he attends to the impressions on his visual sense, and gives to each impression its appropriate name. As the memory becomes stored with words, and the mind accustomed to their application, this readiness of verbal acquisition gradually decays, and at length, with some persons, almost disappears. That this is true, I need only appeal to the experience of those who, after being long disused to such studies, have attempted to learn a language. They will tell you

of their feelings of mental drudgery and intolerable fatigue, during their slow, laborious progress, in acquiring what a child gains without knowing how, and a young person learns cheerfully and without a sense of toil. A small part of these remarks applies only to our vernacular tongue and to oral teaching: the greater part bears on the acquisition of all languages—the dead as well as the living. Our fathers then have done wisely, and followed nature, in making the study of languages a part of our earliest discipline. By this study we gain access to the magazines of thought—we find our way through the vast storehouses wherein are piled the intellectual treasures of a nation, as soon as we have capacity to understand their value, and strength to turn them to good account.

With individuals as with nations, the powers of imagination reach their maturity sooner than the powers of reason; and this is another proof, that the severer investigations of science ought to be preceded by the study of languages; and especially of those great works of imagination which have become a pattern for the literature of every civilized tongue. From time to time there arise upon the earth men who seem formed to become the center of an intellectual system of their own. They are invested, like the prophet of old, with a heavenly mantle, and speak with the voice of inspiration. Those that appear after them are but attendants in their train—seem born only to revolve about them, warmed by their heat and shining by their reflected glory. Their works derive not their strength from momentary passions or local associations, but speak to feelings common to mankind, and reach the innermost movements of the soul; and hence it is

that they have an immortal spirit which carries them safe through the wreck of empires and the changes of opinion.

Works like these are formed by no rule; but become a model and a rule to other men. Few, however, among us are permitted to shew this high excellence. Ordinary minds must be content to learn by rule; and every good system of teaching must have reference to the many and not to the few. But surely it is our glorious privilege to follow the track of those who have adorned the history of mankind—to feel as they have felt—to think as they have thought—and to draw from the living fountain of their genius. Wonderful and mysterious is the intellectual communion we hold with them! Visions of imagination starting from their souls, as if struck out by creative power, are turned into words, and fixed in the glowing forms of language: and, after a time, the outward signs of thought pass before our sense; and, by a law of our being not under our control, kindle within us the very fire which (it may be thousands of years ago) warmed the bosom of the orator or the poet—so that once again, for a moment, he seems in word and feeling, to have a living presence within ourselves!

As the body gains strength and grace by the appropriate exercise of all its members, so, also, the mind is fortified and adorned by calling every faculty into its proper movement. No one will indeed deny, that the imaginative powers are strengthened and the taste improved, especially in young minds, by the habitual study of models of high excellence. It may, however, at first sight well admit of question, when we consider the shortness

of life and the multitude of things demanding our efforts and pressing on our attention, whether a study of the dead languages ought to form a prominent part of academic discipline. Had Europe, after the darker ages, advanced to civilization without the aid of ancient learning, this question might not have been so readily answered in the affirmative. But, without troubling ourselves with imaginary difficulties, we may reply—that the best literature of modern Europe, is drawn more or less from the classic source, and cast in the classic mould; and can neither be felt nor valued as it ought without ascending to the fountain head—that our superstructure must suffer if we allow its foundations to decay—If this answer be not thought sufficient, there is another which admits of no reply, and the force of which no time can take away. Our classical studies help us to interpret the oracles of God, and enable us to read the book wherein man's moral destinies are written, and the means of eternal life are placed before him.

Assuming then that our fathers have done well in making classical studies an early and prominent part of liberal education; there still remains a question whether they are wisely followed up in the system of our University. Those who are best acquainted with our studies will confess with what delight they have witnessed the extent and accuracy of erudition displayed, of late years, by many of our younger members. Whatever is taught in this place ought to be taught profoundly: for superficial information is not merely of little value, but is a sure proof of bad training. Hence, that critical skill which teaches men to dissect the ancient languages—to unravel all the subtilties of their struc-

ture—and to transfuse their whole meaning into a translation, well deserves the honors and rewards we have long bestowed upon it.

In the department of verbal criticism some of the mighty men whose names adorn our domestic history (and whose remembrance we keep alive by this day's ceremonial), have earned a lasting fame; and have proved how in their hands, that knowledge, which with vulgar minds is trifling and without fruit, can be made to assist in the illumination of history, the detection of sophistry, and the support of sacred truth. Few persons are, however, gifted with the powers of a Bentley or a Porson: and were we permitted, on a day like this, to allude to the imperfections of such men, we might perhaps lament, that so little even of their time was employed on matter worthy of the giant strength that God had given them.

I think it incontestably true, that for the last fifty years our classical studies (with much to demand our undivided praise) have been too critical and formal; and that we have sometimes been taught, while straining after an accuracy beyond our reach, to value the husk more than the fruit of ancient learning: and if of late years our younger members have sometimes written prose Greek almost with the purity of Xenophon, or composed iambics in the finished diction of the Attic poets, we may well doubt whether time suffices for such perfection—whether the imagination and the taste might not be more wisely cultivated than by a long sacrifice to what, after all, ends but in verbal imitations—In short, whether such acquisitions, however beautiful in themselves, are not gained at the expense of something better. This at least is true, that

he who forgets that language is but the sign and vehicle of thought, and while studying the word, knows little of the sentiment—who learns the measure, the garb, and fashion of ancient song, without looking to its living soul or feeling its inspiration—is not one jot better than a traveller in classic land, who sees its crumbling temples, and numbers, with arithmetical precision, their steps and pillars, but thinks not of their beauty, their design, or the living sculptures on their walls—or who counts the stones in the Appian way instead of gazing on the monuments of the “eternal city.”

There is one province of verbal criticism which has often been overlooked, or set at nought, and yet would abundantly repay the labour of its cultivation. Words are the signs of thought; and from words themselves (without following them through all their inflexions and combinations in the finished structure of a language,) we may see into the natural feelings and judgments of men, before they become warped by the prejudices of sect or the subtleties of system. If in reading the ancient writers, we meet with words describing virtue and vice, honor and dishonor, guilt and shame, coupled with the strongest epithets of praise or condemnation; then we are certain that these things existed as realities before they became words; or at least, that in the minds of those who, during the early progress of society, built up the ancient languages, they were considered as realities; and on that account (and that account only) had their representatives among the symbols of thought. I believe we might in this way make a near approach to a true system of moral philosophy: and our progress would at every step record a series of judgments, not derived

from any doubtful train of reasoning, but forced on men by the very condition of their existence.

In following up the manly studies of this place, we ought to read the classic page, not merely to kindle delightful emotions—to gratify the imagination and the taste—but also to instruct the understanding; and to this end the philosophical and ethical works of the ancients deserve a much larger portion of our time than we have hitherto bestowed on them. It is indeed notorious, that during many past years, while verbal criticism has been pursued with so much ardour, the works to which I now allude (coming home, as they do, to the business of life; and pregnant, as they are, with knowledge well fitted to fortify the reasoning powers) have, by the greatest number of us, hardly been thought of; and have in no instance been made prominent subjects of academic training. The classical writers did not cultivate the imagination only; but they saw deep into the springs of human thought and action: and rightly apprehending the capacities of man and their bearing on social life, they laid the foundation of their moral systems in the principles and feelings of our nature, and built thereon a noble superstructure. Should any one object to these ancient systems (as Paley and many other writers have done), and tell us that they are obscure, indefinite, and without sanction: we might reply, that in every question, even of physical science, we take but a few steps towards a first cause, before we are arrested by a boundary we cannot pass—before we are encompassed with a darkness no eye can penetrate:—that in moral questions (founded, not on the properties of material agents, which we can examine and sift, again and again, by new experi-

ments, but on the qualities of rational and responsible beings), still narrower is the limitation of our inquiries. To suppose that we can reason up to a first cause in moral questions—that we can reach some simple principle, whence we may descend with logical precision to all the complicated duties of a social being; is to misapprehend the nature of our faculties, and utterly to mistake the relation we bear both to God and man. Such a system may delight us by its clearness, and flatter our pride because it appears, at once, to bring all our duties within our narrow grasp: but it is clear only because it is shallow; while a better system may seem darker, only because it is more profound.

If it be contended, that in the trying circumstances of life the moral systems of the ancients are without sufficient motives: we may reply, that in this respect all moral systems are alike—that all of them lead to consequences, and point to actions, beyond the power of any earthly sanction. When we ascend to the highest virtues and capacities of our moral nature, and think of the tens of thousands who in every age have encountered a voluntary death for the good of their kindred men and the glory of their country, or the still more exalted heroes who have died as solitary martyrs in the defence of some high and holy principle; we tell of deeds which moralists and historians of every age have adorned with their praise, and held up for imitation. But still, however common acts like these may have been in the history of mankind, we have no right to class them as social duties, grounded in mere moral and social feelings; and in accounting for them, our souls recoil from the vulgar sanction of this world's praise. If deeds like these be com-

patible with our nature; then is there something within us, which, however obscured or ill-informed, points to a higher destiny: and in asking for motives, we must quit the province of morals, and enter on that of religion; and in its hopes, faint and feeble as they may often be, we may not only find an answer to our question, but a reason why such high feelings and capacities are implanted in us; leading us, as they do, into acts opposed to the strongest instincts of our nature, and above the sanction of all ordinary moral rules.

It is, I think, certain that the study of an ethical system, grounded on the moral and social feelings, and exemplified by that course of action which in all ages has been honoured by the virtuous and the wise, is not only a good practical training for the mind (which in the busy commerce of life has often more to do with moral than with physical reasoning), but prepares it for the acceptance of religious truth. Whether this opinion be true or false, it is at least certain, that many of the writers of antiquity had correct notions on the subject of natural religion. The argument for the being of a God, devived from final causes, is as well stated in the conversations of Socrates, as in the Natural Theology of Paley. Nor does Socrates merely regard God as a powerful first cause, but as a provident and benevolent being: and he tells us, that as man is the only animal with a soul capable of apprehending a God, he is the only being by whom God is worshipped—that prayer and sacrifice are our duty—that by such services we may learn some of the secrets concealed from men, and know, that the Divinity sees every thing, hears every thing, is present every where, and cares for all his works.

Few however of the heathen Philosophers conceived or uttered sentiments like these; and trained as they were in a superstition which deified their bad passions, and sanctioned their vices under the impure forms of its religious rites, we need not wonder at their limited knowledge of the attributes of God, or their feeble hopes of a more exalted state of future being*.

In speaking of the spirit which ought to guide us in our classical studies, we must look also to their lessons of practical wisdom. History is to our knowledge of man in his social capacity, what physical experiments are to our knowledge of the laws of nature: and well it is for that country which learns wisdom by the experiments of other nations. In ancient history we can not only trace the fortunes of mankind under almost every condition of political and social life; but all the successive actions we contemplate are at such a distance from us, that we can see their true bearings on each other undistorted by that mist of prejudice with which every modern political question is surrounded. We may see that the higher virtues, which are the only secure foundation of a nation's strength, are confined to no time or country; and although sometimes called into their fullest action by a sudden and trying circumstance, are in the common course of things but the slowly matured fruit of good discipline and good government. We may look on states rising out of small beginnings, and watch the means by which they gradually ascend in the scale of national strength. We may mark the giant power of despotism wasting away before a petty combination of free men. We may

* See note (D) at the end.

see that liberty is the handmaid of genius and virtue—that under her fostering care, feelings and sentiments, embodied in national literature, spring up and knit men together as one family, and for a time give them an almost unconquerable might—and lastly, that the loss of national sentiments and national independence, whether commencing in decay from within or violence from without, is alike followed by moral and physical desolation.

We study to little purpose, if while we unroll the history of past time we look but at one side of the portraiture of our race. If we read in it the maxims of wisdom, we find also the annals of crime. If great actions have shewn man's high capacities, the sins and follies, by which all history is blotted, prove also the feebleness of his purpose. We may find in every page the records of selfishness—the desolation produced by the jarring interests of faction. We may see that the foulest crimes have oftentimes been enacted under the fairest forms of government; and that in all conditions of a state (from its beginning to its end) corruption of manners is ever incompatible with true liberty. We may trace the history of a vast empire, from its first beginnings—find it, after many mutations of fortune, rising to great power by the exercise of great virtue—and during the lapse of ages, see its citizens jealous, even to a crime, of their civil freedom. We may then go on, and find the same people becoming willing tools in the hands of bad men, and, at length, so utterly corrupt, as to rush, with one consent, into the basest servitude: and in those evil days, we may find that even the best men were willing to surrender their inheritance, and to seek, in the despotic authority of one, a

refuge against the more intolerable license of the many. We leave however our lesson incomplete if we follow not this history to its end, and see that the calm of despotism, superinduced on a corruption of manners, is followed by a stagnation of all the higher virtues which minister to national strength; and so becomes but the dismal presage of dismemberment and final dissolution.

In the moral, as in the physical, convulsions of the world, the good and the bad are often mingled together in a common calamity; and were we to limit our views to this life only, we might see, in the dealings of God with man, much to perplex and to confound us. Still it is true, even in this narrow view, that there is in the history of past times enough to shew that God will in the end vindicate his character as a moral governor: for we find, that in all ages virtue and wisdom have been the only firm supports of national strength—and that as in individual men, where sin rules in the bodily members, there is a degrading moral servitude, and a loss of capacity for high thought and action—so also that among states and empires, depravity of manners has ever been followed by a loss of glory and a loss of freedom. Hence we may conclude on a large experience, grounded on all history, past or present, sacred or profane, that those public men who have sought to gain their ends by inflaming the bad passions of the people and pandering to their vices, have been traitors to the cause of true liberty, and blasphemers against the very God they professed to worship.

Another conclusion, not less general than the former, may also be drawn from the universal experience of past history—that under no form of

government is man to be maintained in a condition of personal happiness, and social dignity, without the sanction of religion. Finally, as all material laws, and all material organs throughout animated nature, are wisely fitted together, so that nothing, of which we comprehend the use, is created in vain; and as the moral and intellectual powers of man, working together according to the laws of his being, make him what he is—teach him to comprehend the past and almost to realize the future—and rule over his social destiny; we may surely conclude, as a fair induction of natural reason, that this religious nature (so essential to his social happiness) was not given to him only to deceive him; but was wisely implanted in him, to guide him in the way of truth, and to direct his soul to the highest objects of his creation. And thus we reach (though by steps somewhat different) the same end to which I endeavoured to point the way in the former division of this discourse.

III. I now enter on the third branch of our studies, in which we are ourselves considered philosophically, as individuals, and as social beings. Under this head are included, as was observed before, many subjects of great complexity, requiring for their investigation long habits of patient thought—bearing directly on the business of life—and in their application deeply affecting our moral and intellectual characters. If the shortness of time permits us not, in our academic system, to enter largely on this great province of inquiry, and if some departments of it are fitted only for the labours of after life; we are at least bound to give, as far as we are able, a right bias to the youthful sentiments

on all great questions concerning human nature, so that those who begin their moral studies here may be enabled to lay a good foundation, whereon, in maturer manhood, they may build in safety.

Locke's "Essay on the Human Understanding" and Paley's "Principles of Moral and Political Philosophy" have long formed such prominent subjects of instruction in this University, that the remarks I have time to make on our metaphysical and ethical studies will be almost confined to these two works.

It is, perhaps, unnecessary for me to inform you, that Locke supposed the mind to be first of all "as white paper, void of all characters," and that all its subsequent ideas—all its materials of reason and knowledge—are derived from two sources, sensation and reflexion. By ideas from sensation he means the natural perceptions we have of external things through our senses; by reflexion he understands the notice the mind takes of what passes within itself, "whereby it becomes furnished with ideas of its own operations:" and he affirms, "that however great the mass of knowledge lodged within the mind, there can be nothing there which did not come in by one of these two ways."

It is incontestably true, that the senses are the first avenues of our knowledge, and that through them we become first acquainted with external things. In describing the modes in which the mind is furnished with knowledge through the senses, the "Essay on the Human Understanding" is, I think, rather to be considered as defective in execution, than faulty in principle. Since its publication, much good service has been done in this department of inquiry, by Reid and other writers;

but much, if I mistake not, still remains to be done; and were I to speculate on the coming fortunes of the philosophical literature of this country, I should look forward to the time when some one, learned in physiology, instructed in all the laws of those elastic fluids by which we are surrounded and acted on, and skilled in the analysis of the inner workings of the mind, shall bring his strength to bear on this one subject, and present us with a work detailing the whole office of the senses, from childhood to manhood—from the dawn of reason, to its full maturity.

In discriminating the ideas we derive from reflexion, and pointing out the modes in which the mind is gradually raised to its full strength and stature, the “*Essay on the Human Understanding*” is not only defective in execution (sharing the common fortune of man’s work), but is also, I think, faulty in its principles. The account it gives of some of our simplest abstract notions is erroneous; parts of the work are doubtful and obscure; and the whole greatly devoid of philosophic symmetry and order*. Still there are, in every chapter of it, the marks of deep thought—of a strong mind, clearing away the masses of intellectual rubbish by which his whole subject was encumbered—and, above all, of a lofty independent spirit, holding

* It is impossible, in a sketch like this, to descend into particulars; but, without alluding to the faults of omission, I may, in justification of what is here stated, point out, by the way, that Locke’s account of the origin of our idea of *time* is universally considered as wrong—that by a large school of metaphysicians his account of our knowledge of space is regarded as not less erroneous—that most men look upon his discussions, respecting personal identity and the determination of the will, as either defective or false—and that there is no one who does not regard his dissertation on *power* as crude and obscure.

allegiance to no authority but that of truth. Hence, whatever the coming history of letters may bring to light, I cannot imagine the day when the works of Locke, under proper limitations, will not form noble subjects for academic study.

Men seem to differ little in the impressions they first receive from their senses; and perhaps quite as little in the first abstractions they are by nature led to form. Yet how widely separated is one intellect from another! From the stones of the same quarry one man builds a hovel; another chisels out the breathing image of the human form. It is incontestably true, that men are chiefly distinguished from each other by their habits of combining the same original elements of thought. But, in making these combinations, they are not led on blindly and fortuitously, but in obedience to intellectual laws operating with greater or less force on every rational being. What would be the value of the senses were there no sentient principle within? And where would be the use of teaching were there no inborn capacities in the soul to apprehend and to be acted on? It may be true that we have no innate knowledge; but we have innate intellectual powers: and that they are essentially the same in all men, differing only in degree, is evident from the individual habits, the social sympathies, the civil institutions, and the languages of our race; the common feelings that hurry us into action; the common proofs that gain our deliberate assent.

The distinction between innate ideas and innate capacities is almost overlooked in the work of Locke*. To this cause we must attribute the

* The habit of disregarding the distinction between abstract capacities and their particular manifestations, seems to have led Locke into

greatest mistakes and imperfections of his system, and the strange omission of many of the highest faculties of our nature. Of the imaginative powers he hardly says one word, or speaks of them only to condemn them. Yet are they so woven into our nature that they mingle themselves with almost every word and deed—aid us in the interchange of thought—ever give delight, in their exercise, both to savage and civilized man—nor can they for a moment be put off, except by an effort of the mind, in the severe abstractions of exact science. For a metaphysician to discard these powers from his system, is to shut his eyes to the loftiest qualities of the soul, and is as unaccountable as it would be for a physiologist to overlook the very integuments of our animal frame.

It is by the imagination, more perhaps than by any other faculty of the soul, that man is raised above the condition of a beast. Beasts have senses in common with ourselves, and often in higher perfection: to a certain extent also they possess, I think, the powers of abstraction, though this is denied by Locke; but of the imaginative powers, they offer perhaps no single trace. These high

into his strange paradox respecting personal identity. Consciousness (in the sense in which he uses the word) is the proof of our own identity to ourselves; and it is through this principle, in our nature, that we know that we continue one and the same being, and feel that we are personally responsible for our past actions. Remembering or associating the past with the present is one of the faculties of a rational being. But the individual mind existed anterior to the manifestation of this faculty; otherwise there is no common connecting principle among our thoughts, and no such thing as personal identity. In the chapter on "our ideas of substances," he considers a "spiritual substance as the *substratum* of those simple ideas we have from without;" and he justly discriminates between the soul itself and the manifestation of its powers. His distinction is well drawn; but it is, I think, at variance with his discussion on personal identity.

attributes of the soul confer on it a creative energy—aid it even in its generalizations from pure reason—bring before it vivid images of the past and glowing anticipations of the future—teach it to link together material and immaterial things, and to mount up from earth to heaven. All that is refined in civilized life, all that is lofty in poetry or ennobling in art, flows chiefly from this one fountain.

As a matter of fact men do possess imaginative powers, and ever have delighted, and ever will delight in their exercise: and to exclude them from a system of psychology is to mutilate, and not to analyse, the faculties of the soul. They may have been abused; but what of that? every faculty has been abused and turned to evil. Shall we, then, not merely overlook the powers of imagination; but, with Locke, regard men who appeal to them in their proofs and mingle them in their exhortations, as no better than downright cheats? If this be our conclusion, then must the sublime morality of Job—the inspired song of David—the rapturous anticipations of deliverance in the prophecies of Isaiah, stamped in the loftiest forms of poetic imagery, and falling on the ear as if proclaimed by an angel's voice from the gates of heaven—and the fervent testimony of thousands of holy men in every age declaring and enforcing the oracles of God—all and every one of these heart-stirring appeals must fall under our cold and senseless condemnation.

In denouncing the exercise of the imagination as a fraud upon the reason, Locke would have done well had he been considering mere demonstrative truth; but I find no such limitation to his censures. All reason is not mathematical, nor

is all truth demonstrative: and one fault of the Essay of Locke is its attempt to extend too far the boundaries of demonstration. It would indeed be as absurd to apply imaginative language to the demonstrations of pure reason, as to apply the language of demonstration to the analysis of ideal beauty. Each faculty must have its proper place; but none can be lopped off without marring the handy-work of God.

If it be demanded what is the office of the imagination? we may reply that its office consists in its appropriate exercise conjointly with every other faculty of the soul. In one respect, however, its use, as well as its abuse, is so obvious as to deserve a formal notice. Men decide not on reason only—incline not naturally to the right side, like the scale of a balance, by the mere weight of evidence. They act in common cases through habit or affection; and in trying circumstances the determination of the will is often more by feeling than by reason. Hence the imaginative powers, in kindling up the active feelings of the soul, have ever been mighty instruments of persuasion, whether for good or for evil. When Demosthenes, in pleading before the Athenian multitude, swore by the souls of his fellow-countrymen who had periled their lives in battle on the field of Marathon—and when St Paul, speaking in the presence of King Agrippa, held up his hand before the assembled crowd and wished to God that every one of them was not only almost but altogether as himself excepting his bonds—each spoke from the momentary fulness of his own feeling—each spoke to the hearts and bosoms of those around him; and put forth a weapon of persuasion a thousand

times more sharp than ever issued from the cold armory of reason.

Another great fault in the Essay of Locke (involved I think in his very system, which looking only to the functions of the soul forgets its innate capacities), is its omission of the faculties of moral judgment. That such faculties exist, is proved by the sense of shame in a child, by the natural feelings of manhood, by the language of every country, and the code of every nation : and lastly, by the word of God, which speaks of conscience not as a word of convention—a mere creation of the social system ; but as something implanted in our bosoms by the hand of our Maker, to preside there and pass judgment on our actions. We read of men *convicted in their own conscience—living in all good conscience—we are told of the law written in the hearts (of the Gentiles), and of their conscience also bearing witness—we read of a conscience void of offence—of the answer of a good conscience towards God—of holding faith and a good conscience—and of a conscience seared with a hot iron* through long familiarity with sin. What meaning have words like these, if we may at our own will strip conscience of its sanction, and think of it no longer as a heaven-born rule of action ?

The faculties of moral judgment, combined to a certain degree with power of choice and liberty of action, not only distinguish us from the lower beings of creation, but constitute the very essence of our responsibility, both to God and man. Their omission, then, is a great blemish in any system of psychology.

Let it not be said that our moral sentiments are superinduced by seeing and tracing the con-

sequences of crime. The assertion is not true. The early sense of shame comes before such trains of thought, and is not, therefore, caused by them; and millions, in all ages of the world, have grown up as social beings and moral agents, amenable to the laws of God and man, who never traced or thought of tracing the consequences of their actions, nor ever referred them to any standard of utility. Nor let it be said that the moral sense comes of mere teaching—that right and wrong pass as mere words, first from the lips of the mother to the child, and then from man to man; and that we grow up with moral judgments gradually ingrafted in us from without, by the long-heard lessons of praise and blame, by the experience of fitness, or the sanction of the law. I repeat that the statement is not true—that our moral perceptions shew themselves not in any such order as this. The question is one of feeling; and the moral feelings are often strongest in very early life, before moral rules or legal sanctions have once been thought of. Again; what are we to understand by teaching? Teaching implies capacity: one can be of no use without the other. A faculty of the soul may be called forth, brought to light, and matured; but cannot be created, any more than we can create a new particle of matter, or invent a new law of nature.

Philosophy is not grounded on external authority, but in the observed nature of the things we contemplate, whether they be material or immaterial. We may invent systems of legal ethics drawn from the prudential maxims of society, or we may act on a system of Christian ethics founded on the positive declarations of the word of God:

but without an inherent moral capacity, without a moral sense placed in the breast of man, by the same hand that made him, the science of moral philosophy has not, I think, the shadow of any foundation whereon to rest.

Returning then to the point from which we started; if the mind be without innate knowledge, is it also to be considered as without innate feelings and capacities—a piece of blank paper, the mere passive recipient of impressions from without? The whole history of man shows this hypothesis to be an outrage on his moral nature. Naked he comes from his mother's womb; endowed with limbs and senses indeed, well fitted to the material world, yet powerless from want of use: and as for knowledge, his soul is one unvaried blank; yet has this blank been already touched by a celestial hand, and when plunged in the colours which surround it, it takes not its tinge from accident but design, and comes forth covered with a glorious pattern.

If the senses be the first link, connecting the soul with the world without, it is equally certain that they are no sooner excited, than the affections begin to shew themselves: not long after, the moral and imaginative powers appear to germinate—feebly and interruptedly it may be, yet with vigor enough to show that they were rooted in the soul by the same hand that formed it. The powers of pure reason come later into exercise: and at length, by the joint action of all his powers, man becomes what he is—a social, a moral and an intellectual being—fitted in all his capacities for the material world without, and for the social condition in which God has placed him. Some of his faculties may

be powerless because untried—may have withered for want of nourishment; others by good training may have reached their full maturity: but no training (however greatly it may change an individual mind) can create a new faculty, any more than it can give a new organ of sense. In every branch of philosophy the limitations are alike; we may observe the phenomena and ascend to laws, and, by another movement of the mind, ascend to the notion of intelligent causation: but in coming down from these laws to their practical application, creative power is ever out of question with us, whether we have to do with the material or immaterial world; and every change produced by philosophic skill is still subordinate to all the phenomena from which we first ascended.

To the supposition of an innate capacity of moral judgment, some one may oppose the passions, the vices, and the crimes of mankind; and thence infer, either that man is without moral capacity, or that conscience is utterly devoid of sanction. We may, however, reply, that under the blind impulse of passion men not only take that side which their conscience warns them to be wrong, but also in a thousand cases wilfully do that, which reason tells them to be against their highest interest: and if, after all this, we do not deny the faculty of reason, neither ought we to deny the reality of a moral sense. In a diseased action of the bodily frame, the organs of life may become the implements of death: but no one, on that account, discards the inductions of physiology—denies that all parts of the frame are skilfully knit together—or ceases to believe that every organ has its fitting use. So in the immaterial part of

man, sin, like a burning fever, may make havoc among his highest faculties, and end in moral death: but we have no right on that account to regard sin as our proper condition, or to affirm that it is not a moral pestilence destructive of the supreme law of our moral nature. Neither have we any right to say that it blots out the knowledge of good and evil, and overturns the judicial throne of conscience. Such a decision is at war with the recorded judgments of mankind, and strikes at the foundation of all human law. Sin may hold our souls in bondage; but, as long as reason lasts, it destroys not our responsibility; nor is the continued perpetration of crime ever tolerated as a plea in bar of a penal sentence.

The objection just considered, does however prove the feebleness of moral rule—shows that there is something wrong within us, which jars with nature's harmony—that there is in the moral government of God much that is beyond the grasp of mere philosophy; and so teaches us to look beyond this world, and in the consolations of religion and the hopes of a future life to seek a better and a higher sanction; and in the motives of Christian love to find a steadier and more abiding principle of holy action, than all the philosophy upon earth ever has given or ever can give to man in the hour of temptation*.

With all its faults, the "Essay on the Human Understanding" is a work of great power; and were any one to need a proof of this, he has only

* On the subject here alluded to, I would earnestly recommend to the reader's perusal an excellent Sermon by Dr Chalmers, entitled "The Expulsive Power of a new Affection." *Glasgow* 1823.

to consider the impression it produced on the speculations of a former age. Its greatest fault is the contracted view it takes of the capacities of man—allowing him, indeed, the faculty of reflecting and following out trains of thought according to the rules of abstract reasoning; but depriving him both of his powers of imagination and of his moral sense. Hence it produced, I think, a chilling effect on the philosophic writings of the last century: and many a cold and beggarly system of psychology was sent into the world by authors of the school of Locke; pretending, at least, to start from his principles, and to build on his foundation. It is to the entire domination his “Essay” had once established in our University that we may, perhaps, attribute all that is faulty in the Moral Philosophy of Paley—the work on which I now proceed to comment.

I would ever wish to speak with reverence of a man whose name is an honour to our academic body, and who did, I believe, during his time, much more for the cause of revealed truth than any other writer of his country. His homely strength and clearness of style, and his unrivalled skill in stating and following out his argument, must ever make his writings popular: and, speaking for myself, I cannot describe, in terms too strong, the delight I once experienced in studying his Moral Philosophy, where truth after truth seemed to flash on the mind with all the force of demonstration—on questions too which, in other hands, seemed only involved in mystery and doubt. On this account, if there be a defective principle in his system, it ought the more boldly to be combated, lest the influence of his name and the charm of his philo-

sophic manner, lead us only the farther from the truth.

He commences by denying the sanction and authority of the moral sense; and brings the matter to a point, by putting forth an instance, which, like an *experimentum crucis*, is at once to be decisive of the question. Having detailed a case of cold-blooded parricide, he asks whether "a savage, cut off in his infancy from all intercourse with his species, would, when told of this, feel any sentiment of disapprobation." We may reply, (as Paley seems to do) that he certainly would not: for neither could he possibly comprehend the meaning of the tale; nor, if he did, could he find a word to express his natural abhorrence of the crime. If this reply be thought too technical and only a shifting of the difficulty, we may meet the case in a different way, and combat one ideal instance by another. Suppose a solitary being placed from childhood in the recesses of a dungeon and shut out from the light of day, then must he grow up without one idea from the sense of sight. But should we thence conclude that the sense was wanting? Let him be brought into the light; and by laws of vision, over which he has no control, he will, like other beings, gain knowledge from the sense of sight. Let the solitary savage, in like manner, come from the recesses of the forest into commerce with his fellow beings; and he will also, by the law of his intellectual nature, as inevitably gain a sense of right and wrong; and he will then pass a natural judgment on the crime of parricide, like that of any other rational and responsible man. No one now speaks of an innate knowledge of morality: an innate moral sense or faculty, defining and determin-

ing the quality of our moral judgments, is all for which we contend; and Paley's instance is quite worthless for his argument.

Had he grounded his rejection of the moral sense on the avowed depravity of our nature, and the impotency of moral rule, in putting down the evil that is at war with our better feelings, we should, with one mind, have allowed the force of his objection; and some would, I doubt not, have accepted his conclusion. In so doing they would however have done wrong: for the rejection of the moral sense, on religious grounds, is one of the errors of fanaticism. Amidst all the ruin that is within us, there are still the elements of what is good; and were there left in the natural heart no kindly affections and moral sentiments, man would be no longer responsible for his sins; and every instance of persuasion against the impulse of bad passion, and of conversion from evil unto good, would be nothing less than a moral miracle. On such a view of human nature, the Apostles of our religion might as well have wasted their breath on the stones of the wilderness as on the hearts of their fellow-men in the cities of the heathen.

Had Paley, rejecting the authority of the moral sense on grounds like these, proceeded to build up a system of christian ethics, founded on the word of God, enforced by its heavenly sanction, and recommended through the affections to a practical acceptance as a rule of life, he might have conferred a great benefit on the cause of morality and religion. He might then have gone on to shew, that the code of christian morals contains a set of rules co-ordinate with other rules which the wise and the good of all ages have endeavoured to establish and

enforce (with a fainter light indeed, and under a more feeble sanction) as in accordance with the law of our nature, and therefore with the will of God : and afterwards he might have proved, that the rules of action, derived from these two sources, are not only in conformity with each other, but call our highest faculties into activity and return into our bosoms incomparably the greatest sum of earthly happiness. Thus might he have arrived at a perception of an attribute of God, in the only way in which it is permitted us, by the mere force of natural reason, to reach high points of knowledge—by ascending from particular to general truths, from phenomena to laws ; and thus might he have concluded, that as in the material world we see in all things the proofs of intelligence and power ; so also, that in the immaterial world we find proofs, not less strong, that man is under the moral government of an all-powerful, benevolent, and holy God. Following this train of thought he might, lastly, have enunciated a proposition (resembling in its words what stands in the front of his moral system, but far different in its meaning and incomparably more true), that whatever is right is also expedient for man.

Whatever be the faults of Paley's system, assuredly they spring not from fanaticism. After rejecting the moral sense, but on no such grounds as have been just imagined, he proceeds to prove (by reasoning I shall shortly examine) that actions are only to be estimated by their general tendency—that utility is the touchstone of right and wrong. Here we have a rule, simple in its enunciation, and flattering to human pride : for man no longer appears as the subject of a law, but presides with the

authority of a judge, and his rule of action is the leading interest of himself and his fellow-men.

In the material world we have no control over the laws of nature; we gain physical knowledge only by studying them; and new physical power only by obeying them: and in questions of morality—of right and wrong—we are equally the servants of a law, either written in the heart or recorded in the word of God. To hesitate is to rebel; and to wait for the calculations of utility, would be, too often, but to seek a cloak of sophistry as a shelter for evasion.

Leaving, however, mere general objections, let us come to the system itself, and to the rule of its application. Paley first resolves all right into consistency with the will of God: and here, at least, is no matter for dispute; for every moral system implies some law or other, which can only emanate from God, and to obey that law is plainly to obey his will. But how are we to discover that will? We answer, by studying the moral nature of man, and his relation to the things around him—by ascending from moral phenomena to moral laws, which thus become the manifestations of the will of God, and may be embodied in the maxims of moral philosophy: or, by humbly accepting the revelation of his will, which is religious knowledge. But by whatever means we try to discern the will of God—by whatever path we endeavour to ascend towards his holy temple—we see but in part and understand in part; we grasp not one of his attributes; we comprehend not how they co-exist within his bosom; we remain but worshippers at the gate; the veil which conceals him from us cannot be lifted up, nor could our eyes endure the brightness of his glory.

But how little does Paley seem to think of this when he reasons of his Maker as if he were a man, and dares to bind up the *great first cause* in the links of a single disjunctive proposition. God, as far as regards the interests of man, must be benevolent, malignant, or indifferent. This is the fundamental proposition of his moral system. But by what right can man set limits to the moral condition of the Almighty?—the creator of a million worlds, each bound to the others, by never changing laws; and perhaps also of a million intellectual systems, each connected with our own by mysterious relations, conceived in his mind and pre-ordained in his will, yet not revealed to us. In vain we try to comprehend even a single attribute of God; we know him only as he has thought good to reveal himself, by the law written in the heart—by the laws of the material world—and by the declarations of his word. He may, and does, consult his glory in countless ways we know not of. And is it not the height of arrogance in any creature like ourselves, to limit, even in thought, the workings of his power, and to confine the operation of his attributes to such channels only as our language can define and our souls can comprehend?

In the history of moral reasoning, there is not to be found a fundamental proposition more faulty in its principles or more dangerous in its application, than the one just considered. Is it not notorious, that scoffing men, reasoning on like grounds and with like fallacy, have impugned the benevolence of God—have profanely dared to entangle the *great first cause* in a dilemma; pretending to prove, from the misery and desolation they saw around

them, that he either wanted goodness or wanted power?

If the fundamental reasoning in Paley's system be unsound, its rule is unsuitable to our nature. If expediency be the measure of right, and every one claim the liberty of judgment, virtue and vice have no longer any fixed relations to the moral condition of man, but change with the fluctuations of opinion. Not only are his actions tainted by prejudice and passion, but his rule of life, under this system, must be tainted in like degree—must be brought down to his own level: for he will no longer be able, compatibly with his principles, to separate the rule from its application. No high and unvarying standard of morality, which his heart approves, however infirm his practice, will be offered to his thoughts. But his bad passions will continue to do their work in bending him to the earth; and, unless he be held upright by the strong power of religion (an extrinsic power which I am not now considering), he will inevitably be carried down, by a degrading standard of action, to a sordid and grovelling life.

It may perhaps be said, that we are arguing against a rule, only from its misapprehension and abuse. But we reply, that every precept is practically bad when its abuse is natural and inevitable—that the system of utility brings down virtue from a heavenly throne and places her on an earthly tribunal, where her decisions, no longer supported by any holy sanction, are distorted by judicial ignorance, and tainted by base passion. Independently however of the bad effects produced on the moral character of man, by a system which makes expediency (in whatever sense the word be used) the

test of right and wrong, we may affirm, on a more general view, that the rule itself is utterly unfitted to his capacity. Feeble as man may be, he forms a link in a chain of moral causes, ascending to the throne of God; and trifling as his individual acts may seem, he tries, in vain, to follow out their consequences as they go down into the countless ages of coming time. Viewed in this light, every act of man is woven into a moral system, ascending through the past—descending to the future—and preconceived in the mind of the Almighty. Nor does this notion, as far as regards ourselves, end in mere quietism and necessity. For we know right from wrong, and have that liberty of action which implies responsibility: and, as far as we are allowed to look into the ways of Providence, it seems to be compatible with his attributes to use the voluntary acts of created beings, as second causes in working out the ends of his own will. Leaving, however, out of question that stumbling block which the prescience of God has often thrown in the way of feeble and doubting minds, we are, at least, certain, that man has not foreknowledge to trace the consequences of a single action of his own; and, hence, that utility (in the highest sense of which the word is capable), is, as a test of right and wrong, unfitted to his understanding, and therefore worthless in its application.

By what right, either in reason or revelation, do we assert the simple and unconditional benevolence of God; and, on this assumption, go on to found a moral system and a rule of life? If he be a God of mercy, is he not also a God of justice? Sin and misery are often among the means of bringing about the ends of his providence; and are so

far consistent with his government, that they are permitted to last their time upon the earth. Nor is this all. The authority of any law may be abrogated by the same power that made it: and in the revealed history of the dealings of God with man, acts, which under ordinary circumstances would be crimes of the darkest die, have more than once been made tests of obedience or conditions of acceptance. Contemplations such as these make the unassisted reason shrink within itself through pure despair of comprehending the whole moral government of the world. One thing, at least, they do prove—how rash and vain a thing it is, for a feeble and narrow-sighted being like one of us, to construct a moral code, on his own interpretation of a single attribute of the God-head.

A religious man has a happy escape out of all the difficulties of these dark questions. He feels within himself the liberty of choice; his conscience tells him he is responsible for his actions; the word of God points out a remedy for the evils which encompass him: he applies the remedy to himself in humble thankfulness, for it meets his wants and is fitted to his capacity; and, in the terms of his acceptance into the christian covenant, he finds no condition annexed but the love of God and man.

It may perhaps be said, that the moral system of Paley is compatible with the most exalted motives, inasmuch as it takes in the whole christian sanction of a future state; and no man, under any reasonable view of morality and religion, can be called on to act in opposition to his eternal interests. Part of this observation may be just; but it gives no colour of truth to the moral system here con-

sidered, unless it can be also shewn, that our future condition, as revealed to us in the religion of Christ, depends on our following a rule of life, measured by the standard of utility. But is this true! I believe the contrary; and that *the holiness, without which no man shall see the Lord*, is as different from a temper governed (no matter how consistently) by any worldly rule whatever, as light from darkness.

Christianity considers every act grounded on mere worldly consequences as built on a false foundation. The mainspring of every virtue is placed by it in the affections, called into renewed strength by a feeling of self abasement—by gratitude for an immortal benefit—by communion with God—and by the hopes of everlasting life. Humility is the foundation of the Christian's honour—distrust of self is the ground of his strength—and his religion tells him that every work of man is counted worthless in the sight of heaven, as the means of his pardon or the price of his redemption. Yet it gives him a pure and perfect rule of life; and does not, for an instant, exempt him from the duty of obedience to his rule: for it ever aims at a purgation of the moral faculties, and a renewal of the defaced image of God; and its moral precepts have an everlasting sanction. And thus does christian love become an efficient and abiding principle—not tested by the world, but above the world; yet reaching the life-spring of every virtuous deed, and producing in its season a harvest of good and noble works incomparably more abundant than ever rose from any other soil.

The utilitarian scheme starts on the contrary with an abrogation of the authority of conscience—

a rejection of the moral feelings as the test of right and wrong. From first to last, it is in bondage to the world, measuring every act by a worldly standard, and estimating its value by worldly consequences. Virtue becomes a question of calculation—a matter of profit or loss; and if man gain heaven at all on such a system, it must be by arithmetical details—the computation of his daily work—the balance of his moral ledger. A conclusion such as this offends against the spirit breathing in every page of the book of life; yet is it fairly drawn from the principles of utility. It appears indeed not only to have been foreseen by Paley, but to have been accepted by him—a striking instance of the tenacity with which man ever clings to system, and is ready to embrace even its monstrous consequences rather than believe that he has himself been building on a wrong foundation*.

Utilitarian philosophy and christian ethics have in their principles and motives no common bond of union, and ought never to have been linked together in one system: for, palliate and disguise the difference as we may, we shall find at last that they rest on separate foundations; one deriving all its strength from the moral feelings, and the other from the selfish passions of our nature. Religion

* The following are the passages here referred to:

“ The Christian religion hath not ascertained *the precise quantity of virtue* necessary to salvation.”

“ It has been said, that it can never be a just economy of Providence to admit one part of mankind into heaven, and condemn the other to hell; since there must be very little to choose between the worst man who is received into heaven, and the best who is excluded. And how know we, it might be answered, but that there may be as little to choose in their conditions?” *Moral Philosophy*, Book 1. ch. 7.

In the latter years of his life Paley would, I believe, have been incapable of uttering or conceiving sentiments such as these.

renounces this unholy union; and the system of utility standing by itself, and without the shelter of a heavenly garment not its own, is seen in its true colours, and in all the nakedness of its deformity.

It has indeed been said that all men are governed by selfish motives, and that a Christian differs from a worldly man only in acting on a better calculated selfish rule. I hope that no one whom I am now addressing has been for a moment imposed upon by such flimsy sophistry. The motives on which man acts are not less varied than the faculties of his soul; and to designate them by one base name (even if done honestly) would only prove an utter confusion of thought or a helpless poverty of language.

If we adopt, as some have done, the notion of absolute moral necessity, we destroy the very foundation of morality: for every moral system, in implying responsibility, implies also, at least to a certain degree, the liberty of choice between right and wrong. By the long-continued commission of sin, a man may, however, forfeit the power of self-control—may lose the highest prerogative of his nature, the liberty of soul and body. In such a condition he is said, in the emphatic language of Scripture, to be *given up to a reprobate mind*—to be *in the bonds of iniquity*. But no one comes from his Maker's hands in this condition—he gradually sinks into it by a series of voluntary acts for which he has himself to blame, and of which he bears within his bosom the accumulated evil.

The determination of the human will has ever been considered a dark and difficult subject of in-

quity. One cause of this may be, that it takes place more by passion and affection than by reason; and we should be almost justified in affirming, that the will is never determined by reason only, unless some affection be superadded*. But this destroys

* Locke affirms (*Essay on the Human Understanding*, Book II. chap. 21.) that "the motive for continuing in the same state of action, is only the present satisfaction in it: the motive to change, is always some uneasiness:" and consistently with this opinion he goes on to state, "that the most pressing uneasiness naturally determines the will, when man is distracted with different desires." Here is a fallacy of like kind with that which has led men to resolve all motives into selfishness. Uneasiness, mental or bodily, is a *powerful motive* in determining the will, but it is not the *only motive*. The passion of maternal love which urges a mother to caress and protect her child, is surely a feeling very different from the pain which induces a child to withdraw its finger from the flame of a candle. To describe the two feelings by the same term *uneasiness*, tends only to confusion both of thought and word. If the doctrine of Locke be true, a man is in a state of absolute moral necessity—a conclusion, I think, directly contrary to reason and to our own experience.—Again; the doctrine, even in extreme cases, is not true. A man of courage will sometimes endure the protracted torture of a surgical operation without flinching. But no one will, surely, say, that the remembrance of past suffering, or the hope of future good, is at the moment a more intense uneasiness than the pain inflicted by the surgeon's knife. In such a case the will is determined by the hope of future good, and directly against the impulse of present uneasiness.

Locke saw clearly that the will is not generally determined by reason, pointing out to us the greatest positive good: and he was thence led to the theory above stated; which, however inadequate to explain all the active principles of our nature, has in it much truth; and ought to have modified several of the opinions advanced in the latter part of his work, (Book IV. Chap. 17, 18, 19.) Describing the different grounds of assent, he well distinguishes reason and faith from each other. "Reason is natural revelation, whereby the eternal Father of light communicates to mankind that portion of truth which he has laid within the reach of their natural faculties. Revelation is natural reason enlarged by a new set of discoveries communicated by God immediately; which reason vouches the truth of, by the testimony and proofs it gives that they come from God." Faith, according to the same author, is the assent to any proposition, coming directly from God in the way of revelation. But he forgets that religion is a rule of life,

not the sanctity of moral rule ; for we are clearly as responsible for the exercise of our passions and affections as for the other faculties of our nature. Whatever may be the clouds first raised by the subtilty of man, and still hanging over certain moral questions, practically we feel that we are free ; and the judgment of conscience declaring to us that we are responsible for our deeds, is recorded in the language and institutions of every civilized nation in the history of the world. If this does not satisfy the metaphysician, it is at least enough for the christian moralist ; whose rule of life is simple, and whose light is clear.

Leaving, however, all dark questions connected with the determination of the human will ; let us for a moment consider men as they are, and the obvious motives of their actions. However they may differ in the natural strength or cultivation of their individual powers, there are the same essential elements in all ; and morally speaking one man seems to be distinguished from another, only by the direction and expansion he has given to his innate faculties, and the governing power he has gained over them. We see one obeying the movements of

life, and that faith is worthless unless it influence the will : yet, on his own system, the will is never determined by a mere perception of the greatest positive good. In short, whatever practical view we take of human nature, faith, in the sense in which the word is used by Locke, is of no value unless there be added to it some of that very element of assent which he condemns under the name of enthusiasm. Without the co-operation of the affections, the influence of christian rule would soon be extinguished within the bosom—would go out like fire in a damp vault for want of the air of heaven to keep it burning. I have thought it right to point out this inconsistency, because it involves consequences of great importance : and the chapters last referred to, are written with an energy and spirit most captivating to the judgment of young minds.

brute passion—habitually disregarding others, and seeking only his own sensual gratification. In calling such a one selfish we use a term of unqualified reproach; and he stands convicted, not merely by our own moral judgment, but by the recorded sentence of every age and country. Another may be selfish in a different way. He may seek some end his natural feelings and his reason pronounce to be good; but he seeks that end immoderately, and without reference to the well-being of his fellow-men. Such a man is called selfish, when we estimate his life by that perfect rule which tells him to love his neighbour as himself; or even when we try his motives by the humble standard exhibited in the conduct of the world; and in the latter case, though the word selfish be used only in a relative sense, it is still adopted by us as a term of reproach.

But if selfish passions have exercised a predominating influence over the conduct of mankind; there are other motives in our moral nature, leading to acts of self-denial, and to ends connected only with the good of others. Benevolent affection—a desire for the well-being of others, is a natural feeling of the soul, and even the basest of mankind will sometimes manifest its partial influence. It comes not by teaching, for it is perhaps first seen as a mere animal instinct: neither is it the fruit of reason or calculation; for however choked it may be, in common cases, by our baser passions, and kept down by motives returning only into self; it sometimes becomes a strong predominating feeling, leading us into acts contrary both to reason and our worldly interest. Can we then, without a gross abuse of words, confound acts originating in bene-

violent affections, with those that spring from brute passion or the lust of worldly gain? Cruelty and pity, selfishness and generosity, are words in the vocabulary of every tongue; and are placed there, only because they are wanted in the interchange of thought, and in the description of what is ever before us in our commerce with mankind.

All the phenomena of the material world originate in laws of nature, acting either singly or in combination: but to designate all these laws by one name, so far from contributing to philosophic clearness, would prove in us an utter confusion of thought, and an incapacity for understanding the use of general terms.—So also in the immaterial world, the determination of the will takes place in accordance with the laws of man's moral and intellectual nature, and his actions correspond with the passions and affections working within his bosom. But if the actions of man exhibit all the shades of character recorded in written language—then also must the passions and affections be as varied; and to designate them all by one name (hitherto defining only what is base and sordid), would, I think, argue a distorted view of human nature, arising out of moral obliquity or judicial blindness.—A utilitarian philosopher acts wisely, indeed, in hiding the deformity of his moral code by confounding the distinctions between right and wrong: and should his system ever triumph in society, it can only be, by defacing the beauty of language, as well as by destroying the moral dignity of man.

How a Christian can resolve all actions into the effects of mere selfish passion is more than I can comprehend. The Head of our Church, while he had the form of man, shewed not in one act the

element of selfish feeling. The love of man was the principle of his life—the beginning and the end of his ministration. Are we not told to *walk even as our Saviour walked*—to make his example our rule of life? And is it not true, that the Apostles of our religion, warmed by the spirit of their Master, went about doing good—spent their lives in works of self-denial, recommending themselves as ministers of Christ, *by pureness, by knowledge, by longsuffering, by kindness, by the Holy Ghost, by love unfeigned, by the word of truth, by the power of God, by the armour of righteousness on the right hand and on the left?* * To call such men selfish, is to desecrate our language, to blind our moral sense, and to insult all the better feelings of our nature. A man may be saved from the commission of crime through fear—he may do his duty through the hope of reward—but, as the will is ruled mainly by the affections, he cannot go on consistently in the right way unless they be enlisted on the side of his duty: and until he reaches that condition, he is not for one moment in a state of safety, nor do his principles resemble, even in degree, those exhibited by the high examples of christian love.

Coming down, however, to men as seen in common life, we find that selfish passion too often triumphs over all their better feelings, and desolates the moral aspect of the world. There is no fear that they will ever be too kind or generous: now, at least, all fear is from another quarter. Still it is not true that they act exclusively on a selfish rule. They cannot destroy all those kindly elements of their nature which lead them to mingle their own

* 2 Cor. vi. 6, 7.

happiness with that of others. In ordinary cases they act on mixed motives; and their practical standard of right and wrong is the opinion of their fellow-men. No wonder that worldly minds should take their rule of life from the world's opinion. And how operative this rule is upon the human heart, may be seen in the patient endurance of the captive savage on the bed of torture—in the courageous acts of which even vulgar minds are capable when hurried on by the applauding sympathy of those around them—in the fantastic but high-minded chivalry of the middle ages—in the heroic deeds of self-devotion adorning the history of Greece and Rome. Sentiments of honor, founded on opinion, have ever been among the living springs of national glory—and should any one doubt their power in our days, he has only to reflect, how often the love of life, the suggestions of conscience, and the hopes of the favor of God have all been swept away before them.

Let me not be misunderstood; I am not commending the law of honor as the rule of a Christian's life, I am only speaking of its power: and while its power exists in society, it is of the utmost consequence that its rule be as elevated as is compatible with its worldly nature. Whatever exalts the national sentiments, and extends the dominion of conscience by working on the better feelings, must practically influence the moral judgments of mankind, and tend to purify the law of opinion. The indirect influence of the religion of Christ has been in this respect of inestimable value. It has banished slavery from our houses, thrown a charm over the relations of social life, taught us to abhor, and hardly to name, crimes against society once

perpetrated in the light of day, and thrown a thousand links about the bad passions of men, who neither feel its sanction, nor for one moment think of it as a law proclaimed for their acceptance by the mouth of the Almighty. And thus it is that the law of honor, however false and imperfect as a rule of life, has been exalted and purified by the law of God.

If the poet's song inflamed, and the funeral oration sanctified the heroic courage of the citizens of Greece and Rome, they were taught also to believe in the supremacy of conscience, and to regard vice as a violation of the law of their moral nature. A lofty standard of right and wrong was ever set up before them ; and, however corrupt their practice, virtue was honored, at least in word, and was never permitted to pass before their view without its fitting eulogy.

The law of God is indeed written in the heart in characters too plain to be easily misunderstood ; and hence, unless when fettered by system or blinded by passion, men have seldom wandered far from the truth in their speculative judgments between right and wrong.—*Whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report ; if there be any virtue, and if there be any praise, think on these things**. This is the language of St Paul—a man quite as deeply impressed with a conviction of the depravity of our nature as the other Apostles ; and in fervent zeal and knowledge of mankind superior to them all. Yet does he never shut out the better feelings of

* Philip. iv. 8:

the heart—strip us of our power of natural judgment between right and wrong—or put aside the authority of conscience. Still less, in speaking of things honest and just and pure and lovely and of good report, did he for a moment fix their price by a standard of utility, or estimate their worth by any reference to mere worldly good.

Utilitarian philosophy, in destroying the dominion of the moral feelings, offends at once both against the law of honour and the law of God. It rises not for an instant above the world; allows not the expansion of a single lofty sentiment; and its natural tendency is to harden the hearts and debase the moral practice of mankind. If we suppress the authority of conscience, reject the moral feelings, rid ourselves of the sentiments of honour, and sink (as men too often do) below the influence of religion: and if at the same time, we are taught to think that utility is the universal test of right and wrong; what is there left within us as an antagonist power to the craving of passion, or the base appetite of worldly gain? In such a condition of the soul, all motive not terminating in mere passion becomes utterly devoid of meaning. On this system, the sinner is no longer abhorred as a rebel against his better nature—as one who profanely mutilates the image of God: he acts only on the principles of other men, but he blunders in calculating the chances of his personal advantage: and thus we deprive virtue of its holiness, and vice of its deformity; humanity of its honor, and language of its meaning; we shut out, as no better than madness or folly, the loftiest sentiments of the heathen as well as of the Christian world; and all that is great or generous in our nature droops

under the influence of a cold and withering selfishness.

Were it true, that as we grow up to the stature of manhood we cast behind us our passions and affections—that the judgment determining between right and wrong, and the will carrying us into action, are but the measured consequences of abstract reason pointing to us the greatest good; then might the system of utility have some claim to our acceptance. But this is not our moral nature. Our will is swayed by passion and affection: and if we suppress all the kindly emotions which minister to virtue; do we thereby root up the bad passions that hurry us into crime? Incontestably not. On the contrary, we destroy the whole equilibrium of our moral nature, giving to the baser elements a new and overwhelming energy—*we sow the wind and reap the whirlwind*—we unchain the powers of darkness which, in sweeping over the land, will tear up all that is great and good and lovely within it, will upset its monuments of piety, and shatter its social fabric into ruins; and should this hurricane be followed by a calm, it will be the calm of universal desolation. These are no ideal evils. The history of man is too often but a sanguinary tale of the devastations produced by the licence of bad passion.

It is notorious that no man acts up to the pure rule of his religion—that many are indifferent to it, or openly deny its sanction. In examining the effects of the utilitarian philosophy, we have no right to bind up its maxims with the book of life, thereby producing an incongruous system, offensive alike to sound philosophy and true religion—we must try it among men acting on worldly princi-

ples, and knowing no higher sanction than the current sentiments of honour: and, not appealing to extreme instances, but taking men as they are, it may I think be confidently stated, that the general acceptance of Paley's moral rule in any Christian society, would inevitably debase the standard of right and wrong. It strikes indeed at the very root of the higher virtues which in the past history of mankind have ever been held up to honor, as the strong bonds of social happiness, and the foundation of national greatness. And while human nature is what it is, every system that is sterile in great virtues will be fruitful in great crimes. On this truth history is but a continued comment.

If we accept a system of philosophy which looks on actions only as the means to obtain a worldly end, have we not cause to fear that the end will be made to sanctify the means; and that sensual sin, in its most hideous form, will be endured, or perhaps impudently recommended, as a counterpoise to the evils that are wound about our nature, and enter into the very elements of a condition of probation? Have we not cause to fear that private virtue will, before long, be set at nought, or sink under the domination of universal selfishness—and that, in the prevailing disbelief in individual honor, public men will become the mere implements for carrying into effect the basest aims of faction? In such a degraded state of public opinion, bad, unscrupulous, and boasting men, may be elevated to places of high authority; and in their hands the fountains of law and justice may become polluted—the sacred cause of liberty bartered or betrayed—and the national faith sacrificed to vanity, to personal interest, and to party violence.

When once sunk to this condition, a nation has parted with the materials both of its strength and glory—the very elements of its cohesion are passing away: and should there not be found ten just men within it to turn away the avenging wrath of heaven, before long its high places will be laid low, and *its pleasant land will be laid desolate*.

The moral system of utility resolves virtue into a single principle, from which our social duties are all to be evolved as a rational consequence. This simplicity (constituting in truth the greatest fault of the system), gave it a ready acceptance in society: for however impatient man generally is in tracing the unascertained connexion of phenomena, he is never wearied with following out the consequences of an hypothesis. In the latter case his natural pride is flattered—he stands forth not as a humble seeker after truth, but as a dispenser of the laws of nature—and he looks on every conclusion he deduces from his principles, as his own intellectual progeny, to be supported by him at whatever cost.

If a rash spirit of generalization have often retarded the advance of physical science, its consequences are incomparably more baneful in moral reasoning. A false theory in physics affects only our views respecting the connected properties of dead matter: and may be set right, sometimes by a single experiment. But moral theories have no simple *experimenta crucis* whereby their truth or falsehood may be tested; and in their application they may effect the social dignity and the happiness of millions, each gifted with an immortal nature. I am not fighting with ideal evils. Who has not witnessed the effects of false principles carried into

the social system? In severe science a *reductio ad absurdum* drives us at once from a false position. But in moral and political reasoning, a man must be a pitiful advocate whose breast is not hardened against such a weapon, and who, in defending his theory, is not ready to bear up against its most preposterous consequences.

False opinions on moral questions are then not mere idle aberrations of the mind: for they produce a direct, and sometimes, an overwhelming influence on the practical judgments of mankind—on all the maxims of society by which men are generally governed. Not, however, to dwell on the strange errors in modern moral speculations, we may, I think, conclude that utilitarian philosophy, wherever it is received and acknowledged, will teach man to think lightly of the fences the God of nature has thrown around him, and so prepare him for violent and ill-timed inroads on the social system, and for the perpetration of daring crimes.

To return once more to the questions with which I started; I think that to reject the moral sense is to destroy the foundation of all moral philosophy—that the rule of expediency, as stated by Paley, is based in false reasoning on the attributes of God—that the rule itself is ill-suited to the capacity of man—that it is opposed to the true spirit of the Christian religion—and that, however honestly it may be accepted, it tends inevitably to lower the standard of what is right and good. Lastly, we may, I think, assert, both on reason and experience, that wherever the utilitarian system (avowedly based on a rejection of the moral feelings, and an abrogation of the law of conscience) is generally accepted, made the subject of *à priori* reasoning,

and carried, through the influence of popular writings, into practical effect; it will be found to end in results most pestilent to the honor and happiness of man*.

Having examined at so much length the doctrine of expediency, considered as the foundation of moral right, I shall not dwell long on its application to questions of political philosophy, especially as these subjects form so small a part of our system of academic instruction. I may however remark, that as every state is but an assemblage of individuals, each of whom is responsible to moral law, the state itself cannot be exempt from obedience to the same law: and hence if expediency be not (as I have endeavoured to shew) the general test of right in abstract questions of morals, neither can it be the general test of right in questions of political philosophy.

“Right is consistency with the will of God:” and strange must be our notions of the attributes of the Godhead if we can suppose individual and national right to be essentially different from each other. We believe that a nation’s honor is a nation’s strength; that its true greatness consists in the virtue of its citizens; and that the decay of principle and the frequency of crime are the sure preludes of its downfall. Truths like these are attested by every chapter in the written history of our race: and what do they prove, except that God is a moral governor of the world; and, therefore, that in the end high principle and sound policy will be found in the strictest harmony with each other? If in the probationary condition of

* See Note (E) at the end.

the world, nations, as well as individuals, be sometimes involved in calamities they seem not to deserve; we have no right on that account to argue from an exception to a rule, or to deny a general truth attested at once by the voice of history, and the repeated declarations of the word of God.

But if principle and policy be thus in general accordance, may we not admit expediency as the basis of political right? I reply, incontestably not. All the objections urged against the utilitarian principles of moral philosophy apply with three-fold force in questions of national policy: and for this reason among many others, that men, acting for the state with a divided responsibility, have generally a less elevated standard of right than when acting for themselves. Were utilitarian philosophy ever practically recognized among the leading nations of Europe, bodies of men, already base and sordid, would become more base and more sordid, under the shelter of pretended principle; and national faith and honor would soon be banished from the world in the public contests of unblushing selfishness.

I have before remarked that, as a matter of historical experience, religion is essential to the social happiness of man, and consequently to the well-being of every nation. The Christian religion is however of national importance not merely because it is expedient, but because it is true; and because its truths are of an overwhelming interest to every individual member of the state. It is not my present object to speak either of the proofs or the doctrines of our religion; but I may point out, by the way, its humanizing influence on the whole complexion of society. The life and happiness of

a fellow-being is, in a Christian's eye, of a thousand-fold more consequence than in the cold speculations of infidel philosophy.

If there be a superintending Providence, and if his will be manifested by general laws operating both on the physical and moral world, then must a violation of those laws be a violation of his will, and be pregnant with inevitable misery : and if it be forbidden to man to "do evil that good may come;" for like reason it is forbidden to a nation to seek any end, however great and important it may seem, by evil means. Prudence is however a virtue in private life ; and a wise regard to utility is indisputably the duty of a state. Truths like these are denied by no one : all we contend for is—that the maxims of utility must ever be held subordinate to the rules of morality and the precepts of religion. And to what does this conclusion lead us? Only to refer all right to the supreme authority—to look to the will of our lawgiver as our ultimate rule—and to believe that nothing can, in the end, be expedient for man, except it be subordinate to those laws the author of nature has thought fit to impress on his moral and physical creation.

If in moral reasoning it be mere mockery to use the language of demonstration, and to build up systems by trains of *à priori* reasoning upon a single principle ; it is assuredly not less absurd to affect the forms of inductive proof in political speculation. Every political, as well as every moral principle, practically involves the determination of the will, and thereby becomes at once separated from that class of investigations in which we consider the immutable relations of physical phenomena. That the will is influenced by motives, no one pretends

to deny—on that subject enough has been said before : but to compare that influence to a physical cause, followed by an unvaried physical effect, is only to confound things essentially different, and must ever end in metaphysical paradox or practical folly.

Again, discussions on the principles of government are not merely removed from the province of demonstration, but are encumbered with difficulties, peculiarly their own, arising out of the blindness of party spirit or the violence of bad passion. We may argue on the powerful influence of the social affections—we may assume, as a general truth, that man is sufficiently watchful of his worldly interests—we may deduce conclusions from our principles, not as mere abstractions (in which case they would be little worth), but as results founded in long experience and fortified by numerical details : yet with all this, which may be called an extreme case of moral certainty, do we find men ready to accept our conclusions ? Do we not find, on the contrary, that their eyes are shut to every gleam of light not reflected from their own preconceived opinions—that the small voice of truth cannot be heard amidst the brawlings of faction—and that reason is compelled to hide her head among the contentions of vulgar passion ?

Nor have we yet done with difficulties in the application of abstract political principles. Men are commonly ruled by habit and affection. The love of our friends and of our native land—the love of the institutions under which we have been trained, and which, in common cases, give to the mind its whole stamp and character—a feeling of participation in our country's glory—a veneration for forms of government that are blended with historical recol-

lections:—sentiments such as these are honourable and natural to man; and without them, no one, considered as a member of the state, could be a good citizen; nor, as an individual, could he possess either social happiness or moral dignity. Without these feelings, laws would be no more binding than a rope of sand, and the complex and artificial fabric of society would lose its best principles of cohesion, and soon crumble into its first elements.

It is not true that national habits and sentiments are merely the fruit of reason, or that they become confirmed only through an experience of utility. We might, perhaps, assert that they are most inveterate when they are least reducible to any rules of abstract reason. Is it not, indeed, true, that in the Eastern world many centuries and dynasties have passed away, while social institutions, and habits of thought, to European eyes the most strange and fantastical, have continued to flourish in full ascendancy, as if exempt from that power of time which changes all things else? In the great christian families of Europe, similar institutions, and a common religion, have put men more nearly on the same level, and hindered the growth of strongly contrasted national sentiments. Still, whatever be his external condition, there will remain the same original principles in the inner man; and we know, not merely from the evidence of times past, but from the experience of our own days, that civil institutions are not commutable—that a form of government, securing peace and happiness in one country, may be followed by anarchy and misery in another—and that sudden changes in any part of the social system, whatever may be their ultimate advantage, are always accompanied by enormous evils. The axe of the

despot, or the sword of the conqueror, may have sometimes succeeded in lopping off all national sentiments and cutting men down to a common type and pattern. But such a change implies the destruction of every germ of freedom and national honor: it can only be introduced under the dreadful symbols of servitude, and is the sure prelude of misery and moral degradation.

To what then are we led by considerations such as these? To the belief, that all systems of political philosophy based on the doctrines of utility, and deduced by *à priori* reasoning from assumed simple principles (without comprehending all the great elements of man's moral nature, and without, perhaps, even regarding his social condition), are either mischievous or impracticable. Universal systems, like universal nostrums, savour more of political quackery than political philosophy. They are nearly akin to that system of morals which resolves virtue into general benevolence, while it sets at nought the domestic and social affections: and should they hereafter be found applicable to the government of any portion of mankind, it can only be where men have parted with those sentiments and feelings which have hitherto supplied the firmest cement of social happiness and national strength.

In mechanical philosophy we may make what hypotheses we please; we may theoretically construct an arch, without considering the friction of its component parts, and obtain results, which (however unlike any thing found in a natural condition of equilibrium) are mathematically true, and are not without their speculative use. But political philosophy, in this abstract form, has no certainty and no value of this kind. Its objects are essen-

tially practical ; and it must be applicable to some real condition of society, or it is worse than nothing. And most strange and mischievous is that philosophy, which, in considering the stability of a state, overlooks that moral friction whereby its social elements are kept in their true position.

Perhaps it may be said, that the preceding observations are mere truisms denied by no one. But, practically, they have too often been contradicted or overlooked ; and more, I believe, in modern than in ancient times.

A wide examination of such facts as throw light on the statistical history of mankind, and a laborious observation of the causes regulating the accumulation and distribution of national wealth, are among the circumstances by which modern political philosophy has been most distinguished : and as we believe that the knowledge of truth will always, in the end, minister to the honour and happiness of man, we must, as honest lovers of our neighbour, rejoice in the progress of economical science. The economist is mainly employed in observing and classifying phenomena, from which he deduces consequences that are to him in the place of moral laws. The legislator, on the contrary, assumes the principles he carries into action, applies them to a given condition of society (perhaps never contemplated by the economist), and anticipates the results of moral causes working on new social combinations. Under this view the position of the two philosophers is seen in the strongest contrast. The one, like the early observers of the heavens, marks the phenomena out of which he endeavours to trace the relative position and movements of the great bodies of the social system. The other, more

like the physical astronomer, not merely takes for granted all the great movements of the political fabric; but combining with this a knowledge of the perturbations proceeding from the mutual actions of its parts, dares to look into futurity, and to speculate on events, that time may hereafter bring to light within the world he contemplates. The labours of the one belong chiefly to the elements of political philosophy, the labours of the other belong to its consummation.

The great objects, with a wise legislator, are the security of the state and the happiness of its subjects. But national wealth (in however extended a sense the term may have been used) is, after all, but one of the means of securing these great ends. And among the greatest blunders the economist has committed, has been a hasty spirit of generalization (and what infant science has not suffered by that spirit?), an affectation of deductive reasoning, and a rash attempt to usurp, before his time, the chair of the lawgiver. Political economy has, however, now a permanent place among the applied moral sciences, and has obtained an honorable seat in most of the academic establishments of the civilized world. Surely then we may dare to hope (without being accused of rashness in counting on the coming fortunes of mankind), that it may, in the end, assist in enabling men to see more deeply into the sources of social happiness or national greatness—that it may allay the bitterness of national animosity; teaching kingdoms, as well as individuals, how much they gain from mutual support and mutual good-will—and, more than all, that it may (when combined with christian knowledge) help to lighten the pressure of such evils as belong

to our fallen nature, and are among the unavoidable conditions of our probation.

No one denies that the moral and political characters of men are in a great measure formed by the institutions under which they live; and were it asked, whence these institutions derive their permanency and power; we might reply in general terms—only from being well fitted to the social condition of the state. But if we take a historical view of this great question, we shall see more deeply into the origin of national sentiments. We shall generally find that national character has not been formed merely by national institutions; but on the contrary, that the institutions themselves (so far as they are peculiar and permanent) have for the most part taken their original form and impress from the moral condition of the state—that they have grown with its growth—that they have (like the external covering of the bodily frame) been secreted from its life-blood—and that they are the representatives of opinions and feelings called into being from time to time, and too often during successive ages of conflict and struggle. Happy is that country which is rising in the moral scale of nations, and where the constitution contains within itself a provision for the perpetual adaptation of its institutions to the healthy movement of the state! Laws, like those of the Medes and Persians, which alter not, must soon be followed by premature decay, by secret crimes, or bloody revolutions—the sure attendants of unbending despotism.

Lastly, before I quit the subject of political philosophy, let me endeavour to impress upon you the great truth, that no human system can bring the rebellious faculties of man under the law of

obedience; and that no external change of government whatsoever can make him even approach toward a state of moral perfection—an idle dream of false philosophy, contradicted by all the records of mankind, and directly opposed to the word of God. In the latter part of last century there existed a large body of men calling themselves philosophers, the best of whom (as they were seen in a neighbouring kingdom) might be described under the name of *moral fanatics*: for with all the evils they helped to bring upon the world, they still dreamt of doing good. In the internal government of the kingdoms of Europe they saw enormous evils; sufficiently accounting, on their theory, for all the wickedness and misery they saw around them. Hence, they sought not merely to improve, but to re-model the whole social fabric of the world; and they looked forward to a time of moral perfectibility, when the image of philanthropy was to be set up in the high places of the earth, and *all the people, the nations, and the languages, were to fall down and worship it*. Unhappily for themselves and for their country, the leaders of this school of fanaticism were, almost without exception, sunk in infidelity. Had they accepted, even in the humblest degree, the doctrines of the religion of Christ, they never could have made such portentous errors in estimating the moral character of man. With all the sanctions of religion, the terrors of the law, and the numerous links thrown round him by the domestic and social affections, how hard is it to keep him in the right way! And if we free him from these complicated bonds, there is nothing left for him but the base servitude of brutal and selfish passion.

Errors like those just pointed out, are not perhaps likely ever to rise again into political importance, although they may long continue more or less to taint the speculations of one school of moral and political writers.

Having now glanced over the course of your academic studies, let me endeavour shortly to give this discourse a more personal application. I need not tell you, that your high privileges imply corresponding duties—I need not call upon you by the love of honor and the fear of shame—by the duties you owe to yourselves, to your country, and your God, to buckle on your armour while yet you may, and to be prepared at every point, before you go into the world, and enter on those fields of conflict unto which hereafter you may be called. Topics like these are felt by every soul not sunk in sloth and sensual sin; and by generous natures, like those I am now addressing, perhaps the only fear is, that they should be felt too much.

But there still remains untouched another subject, which, by the laws of our foundation, is the end of all our studies. To enter on the subject of sacred learning at any length is foreign to my purpose; and I have a right to take for granted that I am speaking to christian men instructed in the record of their religion—believing in its authority—and acknowledging its sanctions. Are then our lives and affections in accordance with the religion we profess and the high privileges we enjoy? Let every one put this question to himself—let him look into his innermost soul by the light of the word in God, and his own conscience will find the proper answer for him. *Though I speak with the*

tongues of men and of angels, and have not charity, I am become as sounding brass or a tinkling cymbal. And though I have the gift of prophecy, and understand all mysteries and all knowledge; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing...Charity suffereth long and is kind; charity envieth not; charity vaunteth not itself, is not puffed up, doth not behave itself unseemly, seeketh not her own, is not easily provoked, thinketh no evil; rejoiceth not in iniquity, but rejoiceth in the truth; beareth all things, believeth all things, hopeth all things, endureth all things. If our conscience reply that such is our temper, it is well with us. But if, on the other hand, we find lurking within us a spirit of pride, of bitterness, of intolerance, of harsh judgment, of party-spirit, and of other feelings the very opposite to those described in this most touching passage of St Paul; then, whatever be our condition and our attainments in the wisdom of the world, we are outcasts from the flock of Christ, and have no inheritance in his kingdom.*

Learning, almost beyond that of man—a happy power in tracing out the proofs of natural religion—a critical knowledge of the word of God—a grasp of the sharpest weapons of polemical theology, may coexist in a mind manifesting hardly one single Christian grace: nay, hardly performing the most vulgar acts of moral obligation, enjoined, between man and man, by the sanction of the law, and without which the very frame-work of society could not be held together. I will not however dwell on any extreme case like this, but appeal once more to

* 1 Cor. xiii.

your own experience. We have capacities for the perception of moral truth; we know the difference between right and wrong; we naturally approve the one and condemn the other; and our natural perceptions are cleared and elevated by the light of christian truth: our duty is plainly pointed out, and enforced by the most awful sanctions. Nay, more than this; while removed from the influence of temptation, we wish to obey the word; we wish to walk in the paths of the great and the good: and yet we are infirm of purpose, and cannot do what our heart approves and our conscience dictates.

The sensualist surrenders his liberty to base appetite; binding day by day fresh fetters about his limbs, till they have no power of movement. His course of life is often followed by judicial blindness: his mind loses its upright attitude, and becomes tortuous, because it finds no rest; and he casts about his soul the mist of scepticism to keep off that light of truth his eyes can not endure. A religion without power over the heart is deprived of its best evidence; and hence he learns to doubt the truth of a system of which he feels not the benefit, and to turn away from that doctrine by which his own life is condemned. A character like this is of no unfrequent occurrence in the ordinary commerce of life.

But I will suppose you sincere believers in the word of God, and not weighed down by the habitual burden of any flagrant sin. Still, if you look at yourselves, you will find that you not only come immeasurably short of the standard set up by the Word of God, but far short of that you could yourselves set up by the natural light of conscience.

Thoughts like these must pass through the minds of every reflecting Christian: and, at times, while toiling in his earthly vocation, or even when striving after what he thinks his duty, he will be weighed down with a feeling of self-abasement, and be ready to cry out with St Paul, *Oh wretched man that I am, who shall deliver me from this body of death?* Religion gives an answer to this question. We have the power of discerning good and evil; this coexists with our natural condition; but the power of acting steadily and undeviatingly on the dictates of conscience, is not given us by nature: and here religion steps in and points out the only remedy for this discordance and confusion in the moral world.

If we be not the basest hypocrites in our religion—if we do not utter within this sanctuary a mere idle form of words, opposed both to the conviction of our reason and the approval of our conscience—then must we believe that there is a superintending Providence who governs the world. To this doctrine we can make an approach, even by the feeble light of natural religion. We must further believe, that for the moral ruin and confusion we see around us God has provided a special remedy, by the sacrifice of his Son; who now sits exalted at his right hand, as our mediator and spiritual head. And, lastly, we must believe, that by communion with this our head (sustained by all the ordinances of religion—by public and by secret prayer), we obtain at once the benefit of this sacrifice, and the covenanted promise of a new principle of life, and a new power of moral obedience. It is by winding itself into our affections—by reanimating the principle of love—that religion has

this power. In expelling from the heart its corrupt affections, it leaves it not an open prey to still baser appetites, but fills it with its first and noblest occupants: and thus restores the moral man to his Maker's image and his Maker's favour. It is thus that the religion of Christ does not oppose, but lends support, to all those high faculties that give its only true elevation to the character of man: in proof of which (were there any doubt of what I am stating), we need only cast our eyes over Christendom, and contrast its glories with the intellectual darkness of every land whereon the light of the Gospel hath not yet shone*.

Finally, to bring this home to ourselves: we are no true children of our Lord and Master—we are no part of his flock—if we honor him not by the outward forms of allegiance he has himself enjoined; if we seek him not by the way he has himself appointed—by acts of public devotion—by the earnest petitions of private prayer, lifted up to him, not only as the giver of all good, but as the giver of that power by which alone we can root out our corrupt affections, and bring into full life the better principles of our nature. Let, then, prayer be the beginning and the end of our studies; and so they will be consecrated to God. In this way, by his blessing, may we persevere unto the end; treading in the steps before trodden by the great and good men, whose names are the precious inheritance of this house.

Feelings of Christian devotion, unlike ordinary movements of the soul, lose not their strength by repetition: and habits of devotion, like all other habits, gain strength by frequent exercise. But if

* See note (F) at the end.

the habit of secret prayer be suspended, though for a short time; I ask your conscience, whether, during that interval, your moral fences have not been broken down; and whether the spoiler hath not entered in, and committed havoc among some of the best faculties of your inner nature?

Let, then, this ceremonial at which we meet, be an occasion of communion with the living God—let us pray for his protection over ourselves and our household; so that we may all be enabled to walk in the light of truth, and in imitation of the great patterns of Christian life he has vouchsafed to give us. So shall we do our duty to God and man—so shall we be bound together by holy bonds no worldly power can break asunder—and so may we hope that God, as he has done abundantly in times past, will continue, in times to come, to vouchsafe to this christian family the proofs of his protecting love. *Except the Lord build the house, they labour in vain that build it: except the Lord keep the city, the watchman waketh but in vain.*

A P P E N D I X.

NOTE (A), p. 15.

THE paragraph here referred to requires no explanation to any one instructed in the first principles of physical astronomy. The following note is therefore addressed exclusively to those who are unacquainted with the severe parts of inductive philosophy.

In order to understand the nature and importance of Newton's discoveries, we must remember that, in the preceding century, the Copernican system had been promulgated; and that Kepler, after incredible labour, had established the following general propositions on the evidence of direct observations.

1. That if each planetary orbit be considered as a space traced out by a line drawn from the sun to the revolving body; this line traces out equal successive areas in equal successive times.

2. That the planets move in elliptical orbits, having the sun in a common focus.

3. That the squares of the times of revolution of the several planets and the cubes of their mean distances from the sun, are in a fixed proportion to each other.

It must also be admitted that, before the discoveries of Newton, there was current in the philosophic world, a vague and general notion of some material action of the planets on each other. No

one, for example, doubted that the tides were somehow or other influenced by the moon: and, perhaps no one who had adopted the Copernican system, and speculated on the nature of mechanical motion, could doubt that the planets were affected by some action or power emanating from the sun. Before the time of Newton, no one had, however, ventured to promulgate any definite or numerical law of gravitation; still less had any one, on the assumption of a definite law, demonstrated a single fundamental proposition in astronomy. What had been done by preceding philosophers, takes no more from the glory of Newton than the predictions of Seneca take away from the honour of Columbus.

If any one anticipated Newton, in the application of the law of gravitation to the system of the Universe, it was Kepler, and not Hook, as has been sometimes erroneously asserted. Hook did not demonstrate a single fundamental proposition in astronomy; and Newton, I believe, preceded him in the very speculations on which his claims have been sometimes set up. For we must remember that Newton, when a very young man, had just notions of the nature of a central force; and that he endeavoured to prove, by calculation, that the moon was held in its orbit by the sole force of the earth's attraction; and failed, only because the distance of the moon had been falsely estimated by practical astronomers. Leaving, however, mere historical discussion, let us consider one or two of the early steps of his philosophic progress.

He first appeared as the improver of the elements of mechanical philosophy, giving the laws of motion a generality they had not before, and extending their application to the investigation of motions

arising from the combined action of many forces. Starting, then, with the laws of motion (which, in the first instance, may be regarded as an enunciation of certain material phenomena ascertained by direct experiment), his next grand generalization led him to extend these laws to all the bodies of the solar system: and, combining this assumption with the first proposition of Kepler (above quoted), he at once demonstrated that the planetary bodies are retained in their orbits by a force tending to the centre of the sun. Combining then this demonstrated truth with the second proposition of Kepler (above quoted), he then went on to prove, by a new and most refined geometry, that the force, emanating from the sun, must vary inversely as the square of the distance from its centre; or, in other words, must diminish in the exact proportion in which the square of the distance increases. Having once established this great truth, he then proved that the third proposition of Kepler was a necessary consequence of the demonstrated law of central force. Nothing can be conceived more perfect than this induction; which, starting with laws ascertained by observation, ascended by successive demonstrations, and proved that the most striking phenomena of the solar system were necessary truths involved in the operation of one single mechanical law.

By a similar train of demonstrative reasoning, Newton proved that the planets act on the several satellites revolving round them according to the same law by which the sun acts on them; and that the moon is retained in her orbit by the same power which, on the earth's surface, brings a heavy body to the ground. Generalizing the truths at which he had so far arrived by demonstrative reasoning, and

asserting of gravitation only what was known of its nature by direct experiment at the earth's surface, he proved that the centre of each planet may be considered as a distinct centre of a force, not primarily impressed upon the centre; but derived as a secondary phenomenon from the combined action of every particle composing the planetary mass; and he also demonstrated (with a skill almost supernatural, considering the feeble instruments at that time placed within his hands,) that the irregularities of the moon's motions are necessary consequences of the universal law of material action.

Again, knowing as a matter of fact that the planets are not perfect spheres, he proved that their forms are necessary effects of his own theory: and combining these conclusions with the law of universal gravitation, he proved, by most subtle calculations, that certain irregularities in the annual motion of the earth (producing the phenomena of equinoctial precession) are the necessary consequences of the sun's action on the mass of a spheroidal body.

In tracing out the consequences of the law of gravitation, and explaining the minute secular inequalities of the heavenly bodies, much, no doubt, was left by him unfinished. But he had lighted the way for those who were to follow, had given them the key whereby the mysteries of the kingdoms of nature were to be unlocked, and had laid the foundations of every part of that superstructure which has been since reared only by the united labours of the philosophic world.

The refined geometry of Newton, however beautiful as a mode of exhibiting known truths, is now thrown aside as an implement of discovery. "It was like the bow of Ulysses, which none but its

master could bend ;” and the difficult questions of physics are now assailed by weapons of greater power*. We must not however forget, that he was a great inventor in pure mathematics : and though he had not made a single optical experiment, nor taken a step in expounding the laws of the material world, he would still have had an exalted place in the philosophic history of man.

Of the theory of universal gravitation, in the form it has at length assumed, it is not too much to say, that it can be changed by no hand but that which first impressed on matter the laws whereby it continues to be governed. Should man be ever permitted to ascend to some higher universal law, binding together the phenomena of light, heat, magnetism, and all the other subtile agents of our system, still no part of the foundations of physical astronomy would be shaken; and the utmost change to be introduced into it would be a trifling modification of the mere language of some of its propositions.

In the following words (taken from the preface of the first edition of the *Principia*) Newton has recorded with great simplicity, his own method of arriving at philosophic truth. *Omnis philosophiæ difficultas in eo versari videtur, ut a phænomenis motuum investigemus vires naturæ, deinde ab his viribus demonstremus phænomena reliqua. Ex phænomenis igitur cælestibus, per propositiones mathematice demonstratas, derivantur vires Gravitatis, quibus corpora ad solem et planetas singulos tendunt: deinde, ex his viribus, per propositiones etiam mathematicas, deducuntur motus planetarum, cometarum, lunæ, et maris.*

* *Discourse on the Study of Natural Philosophy*, by Sir John Herschel, p. 273.

Near the end of his book of Optics, he writes in the same philosophic spirit—"As in mathematics, so in natural philosophy, the investigation of difficult things by the method of analysis ought ever to precede the method of composition. This analysis consists in making experiments and observations, and in drawing general conclusions from them by induction, and admitting of no objections against the conclusions, but such as are taken from experiments, or other certain truths. For hypotheses are not to be regarded in experimental philosophy. And although the arguing from experiments and observations by induction be no demonstration of general conclusions, yet it is the best way of arguing which the nature of things admits of, and may be looked upon as so much the stronger, by how much the induction is more general. And if no exception occur from phenomena, the conclusion may be pronounced generally. But if at any time afterwards any exception shall occur from experiments, it may then begin to be pronounced with such exceptions as occur. By this way of analysis we may proceed from compounds to ingredients, and from motions to the forces producing them; and in general, from effects to their causes, and from particular causes to more general ones, till the argument end in the most general. This is the method of *analysis*. And the *synthesis* consists in assuming the causes discovered, and established as principles, and by them explaining the phenomena proceeding from them and proving the explanations."

The former of these methods when applied to the investigation of physical phenomena, has long been known by the term *induction*: the latter, in one of the writings of Sir John Herschel, is called

the method of *deduction*. This word had nearly been forgotten, but was wanted, and is again becoming current in the language of philosophy.

In the method of analysis and induction Newton stands without a rival in the history of man; whether we regard the boldness and certainty of his generalizations, or the inventive skill by which he linked together truths before his time sterile and unconnected. In the power of deductive reasoning, he may perhaps have had some equals; but it must ever be difficult to form any just comparison of the intellectual powers of men labouring during distinct periods in the advance of science.

Deductive reasoning is the consummation of exact science, and its importance is shewn in two ways—First, in deducing from first principles, physical truths already known by observation; in which view, it not only offers the highest possible confirmation of the principle from which we start, but it assists and perfects the results of observation. Secondly, in deducing consequences hitherto concealed in the unexplored regions of nature. Such were some of the great secular inequalities, and astronomical periods discovered by Laplace—and such (to quote more recent instances) was the conical refraction brought to light by Professor Hamilton, and the modifications of Newton's coloured rings predicted by Professor Airy before they had ever been exhibited by any experimental test*.

It must however be obvious, that deductive reasoning can never have any value, except when we

* On the effects of inductive and deductive habits of thought on the mind of man, see two very original and beautiful chapters in the latter part of a work published during the past year by the Rev. W. Whewell. *Astronomy and General Physics considered with reference to Natural Theology*.

have to do with the laws of fixed and unchangeable elements: without this condition it leads only to the extension and complication of error. In moral and psychological questions (for example) where all the elements are ill defined, the analytic is the only method of approaching truth. Logic may teach us to disentangle sophistry, to marshal our ideas, and to limit our conclusions: but it cannot, without a miracle, draw fixed consequences from unfixed elements. Those who, on psychological questions, have dealt in the forms of deductive proof, have perhaps done the least harm when they have allowed the imagination entirely to usurp the seat of reason. Their works may then amuse and instruct mankind, though not perhaps in the way the authors first intended. But the affectation of the language of synthetic demonstration on moral questions, has, almost without exception, been followed by practical evils; giving rise to a train of shallow reasoners, venders of trifling propositions, or propagators of antisocial paradoxes.

NOTE (B), p. 17.

WHEN the great bodies of our system are described as revolving *in vacuo* about the sun, we merely understand by such words, that they revolve in a space offering no sensible resistance to their motions; and even this assumption must now be modified, for the most attenuated of these bodies (the comets) probably meet with a resistance sensibly changing the periods of their return. That Newton did not suppose the existence of an extensive vacuum within the limits of our system, is evi-

dent from his speculations respecting the nature of light and the cause of gravitation; and in the tenth proposition in the third book of the Principia, he gives the following reason for supposing, that the motions of the planets may be continued for an indefinite period of time; *si ascendatur in cœlos ubi pondus medii, in quo planetæ moventur, diminuitur in immensum, resistentia prope cessabit**.

We may perhaps make the words this note refers to, somewhat better understood by taking an imaginary case. Let us suppose a sentient being sustained in any part of our system, which is not occupied by the grosser matter of the planetary bodies, and endowed with a power of sight as great as is our own when assisted by the best telescope yet invented. To such a being, all the bodies of our system would at once become visible, and the firmament around would be seen by him, glittering with the light of many million stars. But we must remember that each of these shining points is seen only through the intervention of a beam of light sent down by it directly to the eye. There is, therefore, not a single point in the empty spaces of our system, through which millions of beams of light do not pass unceasingly, yet with a material action so subtile that one beam interferes not with another, but each passes onward, as if moving by itself—the sole messenger from the centre of light to the sentient beings of the universe.

In general considerations like these the mind seems to lose its power, and becomes almost bewildered: and if we call in the aid of calculation, though we build on demonstration and clothe our

* See also the concluding parts of Newton's Optics, especially *Queries* 18, 19, 20, and 28.

results in numbers, our conclusions seem, perhaps more than ever, removed from the grasp of sense. If we accept the theory (considered, by some of those who have most deeply studied it, as well established as the theory of gravitation) which derives the sensation of sight from vibrations propagated through an elastic ether, by the visible object to the eye: then is each beam of light but a part of a distinct system of vibrations, every wave of which diverges through space with a sustained velocity sufficient to carry it eight times round the earth in a single second, and each wave is followed by another at so short an interval, that 100,000 of them are packed within the space of every inch. Millions of such systems of vibrations pass, then, unceasingly through every point of visible space, yet without disorder and confusion: so that each system of waves goes on unobstructed by the others, preserving the individual powers impressed upon it, and through them ministering to the wants of millions of sentient beings.

Our knowledge of the complicated fabric of the material universe (even in those parts we sometimes describe as mere vacuities) does not end here. There is not a point in any portion of our system through which millions of material influences (implied indeed in the law of universal gravitation) are not constantly transmitted. That they differ from the subtile material action last considered is certain; yet no one will deny that they belong to some mode of material action, though he knows nothing of the mechanism whereby they are propagated and maintained.

Had there been any extended vacuities in the universe, it might, perhaps, have been said, that

such portions of space were without any manifestation of the Godhead. But what has been stated is enough to shew that there are no such places within the ken of our senses or the reach of our thoughts. That God is every where is the language of revealed religion ; that God manifests his power every where is, in like manner, the voice of natural religion spoken through the universal domination of material laws.

Considerations like these fill the mind with feelings of the vastness of the power and skill employed in the mechanism of the world ; yet, of the great Architect himself and of the materials employed by him, they give no adequate notion whatsoever. Still we are (in part at least) permitted to ascend up to the laws impressed on matter, and to see how they have been adapted to each other, so as to work together for a common end, and to minister to the wants of man and his fellow beings ; and this is enough for the argument built upon such knowledge.

Truth depends not on authority : but it may be well to fortify this conclusion by two quotations from the latter part of Newton's Optics. "Though every true step made in this philosophy brings us not immediately to the knowledge of the first Cause, yet it brings us nearer to it, and on that account is to be highly valued." Again, he writes, "If natural philosophy in all its parts, by pursuing this method (of analysis and induction), shall at length be perfected, the bounds of moral philosophy will be also enlarged. For, so far as we can know by natural philosophy what is the first Cause, what power he has over us, and what benefits we receive from him ; so far our duty towards him, as well as towards one another, will appear to us by the light of nature."

NOTE (C), p. 32.

It has been sometimes objected to natural religion that it misleads men by a dim and deceitful light, on matters clearly put before them in the word of God. The objection is sound, so far as it applies to those who set up natural, in the place of revealed truth: but it is invalid in any other sense, as it strikes at the root of all knowledge that is not religious. If the conclusions of natural religion be true, then must they well deserve our study; and they are of no small moral worth, provided they be kept in their proper place, and in subordination to truths of a higher kind. Were all men honest believers in the word of God, then could the inductions of natural religion add nothing to the strength of their convictions of his being and providence. But to doubting minds, entangled in the mazes of a false philosophy, or lost perhaps in sense, and unused to any severe exercise of thought, the ready inductions of natural religion may bring convictions of the greatest moral worth—at moments too, when proofs of a different kind would be denied all access to the understanding. Moreover, the habit of contemplating God through the wonders of the created world, and its adaptation to the wants of man, is not only compatible with firm religious belief, but with the highest devotional feeling; as is proved by passages, almost without number, in the sacred poetry of the Bible.

The chief ground, however, for urging the habitual study of natural religion upon those to whom the preceding discourse is addressed, is the belief that it is a wholesome exercise for the understanding. In rising, step by step, to an apprehension of the

great laws of the material world, it is surely well for us to have ever present to our thoughts the conviction that these laws are but a manifestation of the will of a preordaining mind; and in noting the countless relations of material things around us, and their fitness for each other, we surely ought not to shut our eyes to the ever living proofs of wisdom and creative power. The study of the kingdoms of nature, conducted in such a spirit, not only strengthens and elevates the natural powers of man, but tends, I believe, to produce a cheerful sobriety of thought most favourable to the reception of sound religious impressions. Such appears to have been the temper of Paley, especially during the latter years of his life: and in mentioning his name, I cannot but urge on all those who are commencing their academic course, the habitual study of his delightful work on Natural Theology. It is hardly possible to read this book without catching some part of the Author's spirit; and if this spirit be gained, we shall then find the material world with a new life breathed into it, and speaking a language which, to those uninstructed in its meaning, may fall upon the ear without suggesting a single appropriate train of thought.

Since the preceding discourse was delivered, some very important and elaborate treatises have appeared (and others are in progress), enforcing different parts of the great argument to be drawn from final causes. It is, I think, impossible that any one of them, or all of them together, should supersede the work of Paley. They may expand and enforce his argument by new and pregnant illustrations; and they may supply some deficiencies in his work, especially in the part that treats of

the adaptation of the mechanical laws of the universe to each other, and to the wants of man. With one part of the mechanical argument he has indeed attempted to grapple; but not, I think, with the same power he has put forth in the other portions of his volume.

To comment on the treatises just alluded to would be quite out of place in a note like this: but I may be allowed to rejoice, in common with many other Members of the University, at the appearance of a work (referred to in a former note, p. 103) which, combining a philosophic view of the highest generalizations of exact science with an original and well-sustained argument drawn from the universal proofs of wisdom and design, falls in admirably with the course of reading of our best class of students. It is assuredly not too much to say, that this author has well earned the honor of filling up a chasm in the moral literature of his country.

Paley has stated with his usual clearness and skill the importance of comparative anatomy to the doctrine of final causes*. The philosophic anatomist tells us that the organs of each animal may be described as parts of a machine well fitted together, and exactly suited to the functions they have to perform. He reasons from the function to the organ, or from the organ to the function, with perfect confidence; and in cases too where the living type has been never seen. This adaptation may now be called a law of organic structure; and it has been proved only by patient observation, like every other inductive physical truth. When once established it becomes the animating principle

* Natural Theology, Chap. XII.

of every department of natural history : both helping us in the arrangement of known objects, and in the interpretation of new phenomena. To form an adequate notion of the importance of this law, we have only to bear in mind how it enabled Cuvier to reassemble the scattered organs of many beings of a former world—to determine their place in the scale of animated nature—and to reason on their functions with as much clearness as if they were themselves still living before him.

In passing from one order of beings to another as they stand arranged in a museum of comparative anatomy, we see a continued repetition of the same organs, yet in each successive instance we find them changed in a greater or less degree in their proportions and manner of adjustment. This most striking fact bears directly on the argument for design. “Whenever we find a general plan pursued, yet with such variations in it as are, in each case, required by the particular exigency of the subject to which it is applied, we possess, in such a plan and such adaptation, the strongest evidence that can be afforded of intelligence and design; an evidence which the most completely excludes every other hypothesis.” This view of the argument admits of endless illustrations. To each man those instances are the best that spontaneously offer themselves to his mind. The real difficulty is to teach men first to enter on such trains of thought, and to shake off that torpor in which their senses seem often to be steeped. Paley’s instances are well put, and full of meaning: I will endeavour to add one or two familiar examples to them, though at the risk of extending this note to an unreasonable length.

Of all the solid parts of the animal frame, the most obviously mechanical are the jaws and teeth; we know, in each instance, the office they have to perform, and we know that they perform it well. Let us then examine, in a museum of anatomy, the jaws of some one order of animals—for example, the carnivorous. In each instance we find cutting teeth in front, sharp fangs on the sides, and molar teeth in the back part of the jaws. The molar teeth rise into sharp lance-shaped points of hard enamel, and overlap each other in the upper and lower jaw, like the edges of a pair of shears. We see at once an apparatus well fitted for tearing and for clipping flesh, and, in some cases, fitted also for cracking bones; but not at all suited for grinding the seeds or stalks of vegetables. Let us then observe the manner in which the jaws are fitted to one another. At each end of the lower jaw rises a well defined transverse process, working in a corresponding depression of the skull; in short, the jaws work together by a firm hinge, allowing them to open and shut like a pair of shears, but admitting of no grinding motion. That such an articulation is important for the carnivorous animal no one can doubt, who has observed how ill a pair of scissors perform their office with a loose hinge. Thus we see, from one end to the other, an implement well suited for its work, and all its parts in good adjustment. But all these nice adjustments would be lost, were there not levers attached to the jaw, and muscles to work the levers—were not each part of the animal frame adapted to all the other parts—and were not the instincts and appetites of the animal such as are fitted to give to this framework its appropriate movement.

Let us then turn to another order of animals of strongly contrasted habits—for example, the ruminating. We find the lower jaw armed with incisor teeth, working against a hard callous pad, placed upon the upper. This prevents the animal from inflicting a severe bite, but enables it readily to crop grass and to tear off the stalks of vegetables. The sharp fangs are wanting; but, were this the place for the observation, we might shew how it is protected from the fiercer beasts by the instinct of fear combined with acute senses and great fleetness—by gregarious habits—and by formidable weapons of defence placed on its brow, and given, be it observed, to none of the carnivorous tribes. Its flat-topped molar teeth are not formed for cutting, but for grinding; and its jaws are loosely fitted together, so as to allow of a grinding movement. With a change of form in one part, is a change of adjustment in another, and the parts continue to work well together. Had the articulation of the carnivorous jaw remained unchanged, the herbivorous tooth could not have performed its office. But we have not yet done with the adjustments. In the ruminating animal, the enamel is not all placed on the top of the tooth, as in the carnivorous; but is arranged in deep vertical layers, alternating with bony matter; and this arrangement, in all states of the tooth, secures a rough grinding surface. These layers are arranged in irregular curves running lengthwise in the jaw, and their convex and concave portions are so delicately opposed in the upper and lower jaw, as to produce, during a lateral movement (like that of a cow chewing the cud), the greatest possible quantity of friction. Again, we might go on to shew the adaptation of

the muscles of the head to the apparatus here described ; and, beginning with the jaw, we might go through the whole animal frame and prove that all the parts were skilfully contrived and fitted together so as to minister to the wants of the beings they belong to.

Let us next see what is the structure of the jaw in animals of some different and intermediate order. Perhaps the best for our selection are the *rodentia*, or gnawers. Like the ruminating animals, they are without fangs ; but they have long sharp cutting teeth, meeting together like a pair of pincers. That these implements are useful to the creatures possessing them, no one can doubt. It is by their help that the beaver saws down a tree for his water-dam, that the rat gnaws his way through a board, and that the squirrel drills a hole through the shell of a nut, and extracts the kernel. Most of the animals of this order are herbivorous, and therefore grind their food with flat-topped molar teeth. But how is this duty to be performed, as the front teeth lock together in such a way as to make a transverse grinding movement almost impossible ? It is provided for by a new adjustment. A process of the lower jaw works in a depression of the skull, as in the carnivorous order. The articulation admits however of more play, and its direction, instead of being transverse, is lengthwise, and thus allows the lower jaw to rub, like a carpenter's plane, backwards and forwards upon the upper. Every one must have been struck with this movement who has seen a rabbit eating the leaf of a cabbage. The work of nature would still be left incomplete, were there not also a corresponding adjustment in the enamel of each tooth. We find then, on inspection, that

the enamel of the molar teeth is arranged in vertical layers (as in the *ruminantia*), and that they form a good grinding surface; but the direction of the layers is now transverse to the jaw. This is what it ought to be, in order that the teeth may work to the best advantage. The layers of enamel are transverse to the teeth, for the same reason that the iron of a carpenter's plane is transverse to the direction in which the workman uses it. But this is not the only new adjustment in the teeth of these animals. The incisors being implements of perpetual use, are renewed by perpetual growth; there is a special provision for their support in a bent socket, and being enamelled only in front they are always kept sharp. By the very act of gnawing, the hinder part of the incisor wears away quicker than the fore part, and in that way always preserves a sharp inclined edge like that of an adze or chisel—the very form that is wanted by the animal. It is not enough to say that all these adjustments are complete: what would be their value, were not the muscular frame also fitted to them, and the animal powers such as to call them into action?

These instances are among the most obvious and well-known, in comparative anatomy, and have been quoted on that very account. The same kind of reasoning might be applied to the organs of all animated beings; and there is literally no end to the examples of mechanical adjustment. Considered in this way, they put the proofs of contrivance and design in the clearest point of view, and give the argument a unity and connexion it cannot have by the mere consideration of detached instances.

Once for all, and by way of recapitulation, we see the proofs of wisdom and design in the structure

of every being endowed with life. The argument is cumulative; each instance being perfect in its kind. We see the proofs of wisdom still more clearly when we review the classes and orders of animated nature; for we find the God of nature working upon a plan, and adapting the same organs to different ends, by a series of delicate mechanical adjustments. Our argument gains strength as we ascend to a consideration of the mechanical laws impressed on matter: for law implies a lawgiver, and without that notion the word law is without meaning. Still more strengthened is our argument as we learn to comprehend the exquisite adaptation of these laws to the organs and functions of all living beings. We see, then, through all nature, animate and inanimate, but one unbroken impress of wisdom and power: and the conclusion at which man thus arrives, elevates his intellectual condition, and falls in with the appetencies of his moral nature. Surely then we may conclude with Paley, that the world around us proceeds from design and intelligence—"intelligence properly and strictly so called, including under that name foresight, consideration and reference to utility."... "After all the schemes of a reluctant philosophy, the necessary resort is to a Deity. The marks of *design* are too strong to be gotten over—design must have a designer—that designer must have been a person—that person is God."*

NOTE (D), p. 42.

IN confirmation of what is stated in pages 35 and 36, I may refer the reader to Xenophon's

* Paley's Nat. Theol. end of Chap. xxiii.

Memorabilia, Book I, Chap. iv. The following extract shews Socrates' strong and graphic manner of putting the argument from final causes.

Τῶν δὲ ἀτεκμάρτως ἐχόντων, ὅτου ἕνεκά ἐστι, καὶ τῶν φανερώς ἐπ' ὠφελείᾳ ὄντων, πότερά τυχῆς καὶ πότερά γνώμης ἔργα κρίνεις;—Πρέπει μὲν τὰ ἐπ' ὠφελείᾳ γεγνημένα γνώμης ἔργα εἶναι.—Οὐκοῦν δοκεῖ σοι ὁ ἐξ ἀρχῆς ποιῶν ἀνθρώπους ἐπ' ὠφελείᾳ προσθεῖναι αὐτοῖς, δι' ὧν αἰσθάνονται, ἕκαστα, ὀφθαλμοὺς μὲν, ὥςθ' ὁρᾶν τὰ ὁρατά, ὦτα δὲ, ὥστ' ἀκούειν τὰ ἀκουστά; ὁσμῶν γε μὴν, εἰ μὴ ῥῖνες προσετέθησαν, τί ἂν ἡμῖν ὄφελος ἦν; τίς δ' ἂν αἰσθήσεις ἦν γλυκέων καὶ δριμέων καὶ πάντων τῶν διὰ στόματος ἡδέων, εἰ μὴ γλῶττα τούτων γνώμων ἐνείργασθη; Πρὸς δὲ τούτοις, οὐ δοκεῖ σοι καὶ τόδε προνοίας ἔργῳ εἰκέναι, τὸ, ἐπεὶ ἀσθενὴς μὲν ἐστὶν ἡ ὄψις, βλεφάροις αὐτὴν θυρῶσαι, ἃ, ὅταν μὲν αὐτῇ χρῆσθαι τι δέῃ, ἀναπετάννυται, ἐν δὲ τῷ ὕπνῳ συγκλείεται; ὥς δ' ἂν μὴδὲ ἄνεμοι βλάπτωσιν, ἡθμὸν βλεφαρίδας ἐμφῦσαι· ὀφρῦσί τε ἀπογεισῶσαι τὰ ὑπὲρ τῶν ὀμμάτων, ὥς μὴδ' ὁ ἐκ τῆς κεφαλῆς ἰδρὼς κακουργῇ· τὸ δὲ τὴν ἀκοὴν δέχεσθαι μὲν πάσας φωνὰς, ἐμπίπλασθαι δὲ μήποτε· καὶ τοὺς μὲν πρόσθεν ὁδόντας πᾶσι ζώοις οἴους τέμνειν εἶναι, τοὺς δὲ γομφίους οἴους παρὰ τούτων δεξαμένους λεαίνειν· καὶ τὸ στόμα μὲν, δι' οὗ ὧν ἐπιθυμεῖ τὰ ζῶα εἰσπέμπεται, πλησίον ὀφθαλμῶν καὶ ῥινῶν καταθεῖναι· ἐπεὶ δὲ τὰ ἀποχωροῦντα δυσχερῆ, ἀποστρέψαι τοὺς τούτων ὀχετοὺς, καὶ ἀπενεγκεῖν, ἢ δυνατόν προσωτάτω, ἀπὸ τῶν αἰσθήσεων· ταῦτα οὕτω προνοητικῶς πεπραγμένα, ἀπορεῖς. πότερά τυχῆς ἢ γνώμης ἔργα ἐστίν;—Οὐ μὰ τὸν Δί', ἔφη, ἀλλ' οὕτω γε σκοπούμενῳ πάνυ ἔοικε ταῦτα σοφοῦ τινὸς δημιουργοῦ καὶ φιλοζώου τεχνήματι.

I have quoted this passage in the hopes of inducing the reader to reconsider the whole chapter; both for its own value, and because it is in itself an ample refutation of an opinion unaccountably maintained by some writers, that the heathen philosophers of antiquity had no knowledge of God except what was derived through a corrupted tradition.

Were it true (which it certainly is not) that the heathen writers never argued from final causes to the being of a God, still we should not be justified in saying that the argument had no weight when handled by a Christian. Truths, whether physical or moral, are not less real because they have been hidden for many ages, and are only brought to light by the progress of other truths. No wonder that the truths of natural religion should have been oftener pressed by christian than by heathen writers. The Christian makes them not the foundation of his faith. He seeks them not because he doubts, but because he believes: for they are the external means of communion with a being whom he is taught to love, and in whose more immediate presence he hopes hereafter to dwell. It is through these embodied truths that in the mechanism of his own material frame, in the wonderful adaptation of his senses to the material world without, in the constitution of his mind whereby he learns the existence of intellectual natures like his own, in his power of modifying the order of events by the operations of his will, in his capacity of ascending from phenomena to laws, and of contemplating through them the marks of pre-ordaining wisdom—it is through these truths that in all the world around him, in whatsoever manner his soul regards it, he is taught to read an everliving lesson of the benevolence and the power of God.

We think that we have some adequate knowledge of our fellow-beings, because they resemble what we have a consciousness of within ourselves. Without stopping to inquire how we come by this knowledge, let us suppose some one to ask how we come by the knowledge of a God: we can only reply, as has often been done before, that we know him by his works, animate and inanimate, and by the written revelations he has given of himself. Should however this interrogator go on to say, that God speaks not to us through his works, but only through the words of his revelation, wherein he told us from the beginning that *He created the heaven and the earth*; we may then retort another question, and ask, What knowledge could mere sounds like these convey through the ears to the heart, were there not already placed within it some knowledge of the being of a God; or at least were there not in the soul some natural and inborn power of rising to the apprehension of a general religious truth when presented to it in the form of a mere abstraction?

That our knowledge of God is in a certain sense inadequate, whether it be conveyed to us as a truth of natural or revealed religion, no one can for a moment doubt. It may be suited to our wants, but it can bear no measure to his glory. *No man hath seen God at any time*, because he is every where. And if he has sometimes, during the brief history of man, given a sensible manifestation of his more immediate presence, it has been by stripping himself (if I may so speak) of his attribute of ubiquity, and condescending to put on the semblance of some material power, or the glorified similitude of the human form. So also in the language of his written word, he is either described by negatives, or divested of

his immaterial attributes, that he may be brought down to the grasp of human thought. Not only in the extent and power of his operations, but assuredly also in their very kind, he is infinitely above the reach of man's imagination. If revelation cannot, without a miracle, give to a blind man any knowledge of the sensations caused by the pulsation of light upon the eye; still less can it convey to the mind's eye any knowledge of God that is not limited by the conditions of our being. Surely we may, then, believe that in religious knowledge there is much that is imperfectly comprehended: and if in the natural world each step of discovery bring to light new and unexpected truths, we may well believe that a revelation (expounding our moral condition in relation to God, and giving us a glimpse of our future destinies) must also bring to light something that is above reason—something that is new and unlooked for.

Let me not, however, be misunderstood. If revelation teach knowledge above reason, it does not thereby destroy the fair inductions of reason, otherwise the God of nature would be in contradiction with himself—A demonstration is not the less true because it is confined to its own premises: and if we deny the value of natural truth because of the narrowness of our faculties; we might, by like reasoning, set religious knowledge at naught, because it is limited by the conditions of our intellectual nature. In one word, whether we argue from man's ignorance or knowledge, we have no right to rob him of his inborn capacities—of the power of ascending from phenomena to the contemplation of laws, and of deducing general truths—of discerning the marks of designing wisdom in the universe—and of

seeing that there is over all matter and all mind the will of a presiding God.

It may perhaps be well to consider some of the causes that have led men to reject the proofs of natural religion. One cause is the affectation of originality. "The proof of a Deity drawn from the constitution of nature, is not only popular but vulgar; and many minds are not so indisposed to any thing which can be offered to them, as they are to the *flatness* of being content with common reasons*." This remark of Paley's is applied to certain writers, who, to rid themselves of an intelligent Creator, have loaded natural history and physiology with the wildest and most preposterous hypotheses.

Another cause is ignorance of the laws of nature. Man is unwilling to think himself ignorant; and he naturally enough thinks lightly of the proofs he does not understand. Religious men may easily fall into this error: for their minds dwell on proofs not derived from any study of the material world, and they know full well, that the hopes and sanctions of natural religion are little fitted to satisfy the wants of man. Hence they reject it altogether. But they ought to know that the laws of nature, when properly understood, are records of the will of God, and are therefore fit matter for exalted study: and they have no right to argue from their own ignorance.

A third cause for rejecting natural religion is the reception of a narrow and false psychological system. This cause has, during the past century, tainted some of the best writings of the Ecclesiastical Members of our Church. Let us suppose some one to

* Natural Theology, Chap. xxiii.

start with such propositions as the following: Knowledge is only a perception of the agreement and disagreement of our ideas—we can form no ideas without perception—and we have no perceptions, except through impressions on the organs of sense. If all this be taken for granted, he may soon go on to prove that, out of such beggarly elements, it is impossible to rise to any moral or religious truth; and therefore that all knowledge which is not physical, must be supernatural, and can come to us only by the teaching of revelation. Without stopping to ask whether man, if such were the whole of his immaterial powers, could be a fit recipient for any religious truth, or could ever comprehend it, we may ask the supporters of this hypothesis what account they have to give us of the thousand abstractions which, by our nature, we are compelled to form—of our moral sentiments—of the creative energies of the imagination—of the efforts by which we mount from individual phenomena to the comprehension of general laws, and of the skill by which we elicit from them unknown truths. There are incontestably, in the mind of man, innate capacities for the reception of knowledge according to the measure of his intellectual nature; and to these there are super-added innate active principles (absolutely distinct from the passive reception of impressions from without) whereby he is constrained to fashion the materials of thought into such forms as he is taught to seek after or his soul desires. These active principles are as much a part of the inner man as his eyes and his fingers are portions of the framework of his body. Religion takes these inner powers and capacities for granted. She appeals to them, sets them in a new movement, and makes them the levers

of her strength ; but she creates them not anew, any more than she gives to the outer body new limbs for motion and new senses for perception.

We know from our own experience two kinds of material changes—one chiefly dependent on the will of man—the other, as far as our senses are concerned, dependent on the mere qualities of matter. From the nature of an effect produced, we can also judge whether it be the result of mere material action, or a production of design and skill. Starting from these elements, we can ascend to the knowledge of a higher order of causation—of what we call material laws regulating a succession of material actions—and of a preordaining will manifesting its power in contrivance and adaptation. Whether we stop short, or whether we ascend to the highest truth, we are immeasurably above the reach of that narrow system of psychology which, in denying innate knowledge, deprives man also of those innate capacities and active powers whereby his whole knowledge is built up.

Those who start with a psychological foundation on which nothing can be built, and end by rejecting the moral sense, and the power of discerning God in the wonders of his creation, ought also (if they mean to be consistent) to deprive man of the capacity of apprehending general truth of every kind. Let them, however, look well to it, whether they do not contradict the plain declarations of the word of God ; and whether, in mutilating the best faculties of man, they do not shut out from religion both its evidence and meaning. In plain truth, they cheat themselves by the mere jargon of metaphysics ; and, without knowing it, they surrender one of its strongest out-works, to a cold and atheistical philosophy.

Lastly, some men have rejected natural religion through mere fanaticism. They believe our corruption to be so entire, that they deny to the natural man, all perception of the beauty of moral truth—all knowledge of God—and almost shut out from him the faculty of reason. That the powers of natural reason are in a great measure independent of religious light is, however, certain from the fact—that some of the greatest discoveries in exact science have been made by men notoriously not religious. Again, religion herself appeals to reason, and has nothing whereon to rest, if we abrogate all the natural powers of reason. Were this the proper place for the discussion, we might say that man's depravity is in his heart—that it is shewn not so much in the dimness of his moral and intellectual vision, as in love of self, in impurity of thought, and in the want of an inherent power of struggling with temptation and keeping in order the fiercer passions. If we deprive man of all power of moral judgment, does he not cease to be responsible? and do we not seem at one breath both to impugn the justice of God, and to contradict his written word? But with the persons here considered, it is in vain to argue. They may, however, be open to an appeal of another kind. They may see in many christian writings (for example, in the works of Dr Chalmers and the late Robert Hall*)

* In mentioning the name of Hall, I may, I hope, be permitted to state that on reading (now many years since) some of his wonderful discourses, I first learned to doubt the truth of that system which regards utility as the test of moral right. At a time when this doctrine generally prevailed in England, he set himself against it, with a power of moral reasoning—with a subtilty and fervid eloquence, which placed his works at once among the highest productions of the human mind. While this discourse was printing, it was not my wish to look out for authorities;

how possible it is for man to feel a deep conviction of the natural depravity of his heart, at the time that he has sublime and philosophic views of those moral and intellectual capacities he derives from God.

In conclusion, I may briefly notice an hypothesis, put forth, perhaps, in the hope of reconciling conflicting notions*. It assumes that we have no knowledge of God or his attributes from the light of nature: but when this knowledge has been given by revelation, it presumes that we can *then begin* to reason from natural phenomena, and confirm the truths of religion *by almost irresistible arguments, which may be deduced from every object around us*. Now this hypothesis labours, if I mistake not, under three insuperable difficulties. It has to explain away some of the clearest passages in the New Testament—it has to fight for a most untenable position: namely, that the heathen world knew nothing of God, except what first came through a corrupted tradition—And, lastly, it puts man in a new logical condition unsupported by any rational analogy. The inductions of natural religion are of a positive nature, and must be either true or false. If they be false, they cannot confirm what is true—If they be irresistibly true, then must their truth

authorities; as that would have been but a vain and false affectation of research. But it would have been well to have fortified my feeble argument with some passages from the immortal works of Hall: and I cannot do better now, than refer the academic reader to them—especially to his two discourses entitled *Modern Infidelity considered*, and *Sentiments proper to the present Crisis*. In them both there is something of an academic cast; and for moral grandeur, for christian truth, and for sublimity, we may doubt whether they have their match in the sacred oratory of any age or country.

* See the *Boyle Lecture*, Vol. II. by the Lord Bishop of Durham.

depend on their own proper evidence, and not on an extrinsic authority.

NOTE (E), p. 81.

My object in this note is to bring forward, as briefly and distinctly as I can, though at the risk of repeating what has been stated before, some specific objections to Paley's *Principles of Moral and Political Philosophy*.

1. The first objection is to the title of the work. If we reject the moral sense, and overlook all the inherent capacities and active principles whereby man becomes a responsible being; we deprive moral speculation of all the essentials of philosophy. It may however be said, that the objection is of small moment, provided Paley's ethical rules be true, and of general application.

2. He first examines the rules of life by which men are ordinarily governed—the *Law of Honour*—the *Law of the Land*—and the *Scriptures*.

His account of the Law of Honour is both meagre and unphilosophical. It may be said, that he has a right to limit the meaning of his words as he thinks fit: but his definition partakes of the fault that taints all his system—It gives a rule, but overlooks the principle. The Law of Honour is not confined to rules of fashionable life. It is deep rooted in human nature—is felt by all beings from the savage to the monarch—and its power is implied in the very instinct which leads men to congregate in societies. Were man cut off from all

regard to the opinion of those around him; he would be deprived of a principle, planted in his breast, by the hand of God, as a safeguard against what is base, and an incentive to what is great and good—The principle of honour may have been abused—may have led to much evil. But in that respect it shares but the common fate of all the principles of our wayward nature. All of them have been abused—Religion roots not out the elements of human nature, which are part of God's work: but she brings them under the law of obedience, and restores them to that place and office for which they were destined by the Author of our being.

In considering *the Law of the Land*, Paley points out, with great skill, some of its defects as a moral rule, but he overlooks a most important distinction. Laws are but expedients for the well governing of particular states. They are founded in utility, and limited in their application. But moral rules are not so limited, neither have they the same foundation. This distinction seems both certain and obvious. We may further remark, that the expediency of a law must ever be held subordinate to moral rules: otherwise we only raise our social fabric, by dragging away the stones from its foundations.

Of the Scriptures he remarks, that in them *Morality is taught by general rules, occasionally illustrated by fictitious examples or by such instances as actually presented themselves.* All this is true. The Bible is unquestionably not a formal book of casuistry: neither does it by any means supersede the importance of rules, founded in general expediency, for determining questions of social right

between man and man. Many of our duties in society are artificial, and can only be ascertained by usage or positive enactment. But on questions of moral right, not only are the Scriptures the supreme authority in all cases where they contain specific declarations; but their maxims are ever directed through the affections to the moral sense; and I believe that any man who has studied them, and honestly acts upon their principles, is a thousand times more likely to determine rightly on any difficult moral point, than one who interrupts all the movements of his moral sense, and resolves not to decide till he has calculated the chances of utility.

3. Having already considered the argument by which Paley rejects the moral sense, I need not repeat what is stated in the preceding discourse, (p. 58, &c.) His conclusion is, I think, false; and his reasoning is of no weight, except for the intent of shewing the feeble sanction of mere moral rule.

In the ordinary course of life, men act through passion, affection, or habit. A good system of moral philosophy ought to analyze the active principles of our nature, and then shew their bearing on moral duties, and their subordination to the faculty whereby men know right from wrong. It may deal in general rules: but its rules are worse than nothing if not constructed with immediate reference to our moral capacities—in one word, if they do not ultimately rest on the supremacy of conscience. A system that defines moral right by the standard of worldly utility, not merely leaves out of account the best active principles of our nature; but makes them worse

than nothing—a set of perturbations interfering with the calm results of a dispassionate calculation. Such a system has no fitness for man's nature.

4. *Virtue is the doing good to mankind, in obedience to the will of God and for the sake of everlasting happiness.* This is the definition adopted by Paley; and it is, I think, open to many grave objections.

In the first place, without straining its meaning beyond what the words can well bear, it does not include many important christian virtues; such as self-denial, resignation to the will of God, and voluntary suffering for the sake of conscience. It may be said that these virtues indirectly benefit mankind: but the good of mankind is not, at least, their immediate object.—Again, a man may act well from habit or affection, without ever thinking of reward, either here or hereafter. Surely such actions cease not to be virtuous; yet they come not within the words of Paley's definition—Lastly, if such be our definition of virtue, what becomes of the virtues of the heathen world—of men who knew nothing certain of a future state, and perhaps seldom thought of it? We know that they possessed a moral nature—that they reasoned correctly and beautifully on moral questions—that many of them acknowledged the supremacy of conscience—and that they sometimes performed heroic deeds of self-denial. Are we then (for the sake of a mere moral definition) to blot out the recorded sentiments and actions of mankind—to destroy the distinction between good and evil—and to denounce all the deeds of the heathen world as violations of the law of nature, and moral wrongs, because performed by men, who, having no clear revelation of a future

state, could not erect their rule of life upon its sanctions? In answering this question by a decided negative, I wish to fence myself against an objection which may rise in the minds of some religious men. I consider these as questions of morality and not of religion. If it be from revelation only that we have any certain knowledge of a future state and of the conditions of our future acceptance; it must be from the records of revelation only that we can learn what are the qualities of the soul which are to fit it for the future presence of God.

Bishop Butler commences his *Dissertation on the Nature of Virtue*, with the following assertion. *That which renders beings capable of moral government is their having a moral nature, and moral faculties of perception and of action.* He soon after adds, *That however much men may have disputed about the nature of virtue, and whatever ground for doubt there may be about particulars; yet that in general, there is an universally acknowledged standard of it. It is that which all ages and all countries have made a profession of in public: it is that which every man you meet, puts on the shew of: it is that which the primary and fundamental laws of all civil constitutions, over the face of the earth, make it their business and endeavour to enforce the practice of upon mankind: namely justice, veracity, and regard to the common good.* Here every thing remains indefinite: yet all the successive propositions have their meaning. The author knew well that the things he had to deal with were indefinite, and that he could not fetter them in the language of a formal definition, without violating their nature. But how small has been the number of moral writers

who have understood the real value of this forbearance !

One great injury done to moral reasoning has arisen from an attempt to assimilate it too closely to the method of the exact sciences. By confounding moral with physical causation, and by considering moral motives as the necessary precursors of un-deviating moral consequences, men have contrived to reach the most revolting and unnatural conclusions. They have denied to man all freedom of will, and liberty of action ; and bound him up, physically and morally, in the fetters of an unrelenting fatalism. We know nothing of the inner movement of the soul except by consciousness—by reflecting on what passes within ourselves. In this way we learn that, within certain limits defined by the condition of our being, we have freedom of will and liberty of action ; and our moral sense falls in with this belief, and teaches us that we are responsible for our choice between good and evil. Practically at least, we know that we are free, and the sophistry of man can never make us part with this knowledge*. To pretend, by any subtilties of inductive proof, to reach a psychological conclusion that interferes with those first elements which we know by internal consciousness, is not one atom less absurd, than it would be for a mechanical philosopher to mock us with the pretended proof of some physical law, while the law itself was falsified by the evidence of direct experiment.

Another great injury done to moral inquiries,

* Connected with this question the Reader is requested to consult Butler's Analogy, Chap. vi. *Of the opinion of Necessity, considered as influencing Practice.*

has been the affectation not only of logical definitions, but of deductive proofs. Paley's system of morals is included in this remark. The subject has been hinted at above, and is so important that I may be permitted to return to it again*. There is in the human mind a passion for general truths, and a restless desire of deducing conclusions from first principles. This passion, while under control, is a most valuable attribute of our intellectual nature: but it has sometimes done much mischief. In physical questions it has led men to grasp at generalizations beyond their reach, and to entrench themselves among hypotheses, while they ought to have been moving onwards among the foundations of knowledge, by the light of experiment. In moral questions, this passion has led men to false definitions and false opinions on the nature of virtue. An excellent but most paradoxical writer—not excluding (as Paley does) the moral sense in his estimate of right and wrong, but seeking for a definition to comprehend every act of moral obligation—ended by regarding virtue as a mere passion for the general good; or, in his own language, as, *benevolence to being in general*†. But what, on such a definition as this, is to become of the private affections? They lead us to seek the happiness of certain individuals far more than that of other men; and therefore they militate against this rule of virtue. In severe science a rule which is found not to comprehend every particular case, is at once either limited or rejected. In like manner, unless we wish to surrender all the social af-

* See above p. 79: and the end of Note (A), p. 104.

† See *A Dissertation on the Nature of true Virtue*, in the works of President Edwards, Vol. II.

fections—unless we wish to look on maternal love and all the train of blessed consequences following after it, as moral evils—we must reject this definition of virtue, and along with it the moral system of which it forms a part.

The domestic and private affections are the very channels through which the God of nature ordained man's benevolence first to flow. His happiness and social dignity are wound up in them; and deprived of them he becomes at once devoid of moral strength. To reject them, is to mutilate and not to elevate his moral nature; and is not a jot more wise than it would be for a philosopher to pluck out his eyes in the hopes of speculating with the greater clearness on the general properties of light. The general good of man is incontestably a noble object; but it can be promoted by those means only which God has given us. And those men have ever been found to follow this noble object most steadily and wisely, who have obeyed the laws of their moral nature, and fortified themselves by the practice of the humbler virtues first placed within their reach.

The author to whom I have just alluded, saw not the obvious effects of his own principles. But bold and irreligious men were glad to follow them out, and to abide by their basest consequences. In their scheme all virtue merged into universal philanthropy—the private affections were but drains, carrying the waters of life away from their proper channel—marriage was a monopoly—patriotism a prejudice—and the common bonds of social life but the fetters of ignorance and intolerance.

This is a most remarkable instance of the mischief of general definitions and deductive reasoning in moral questions. It was suggested by some

striking passages in Hall's discourse on *Modern Infidelity*, to which the reader is referred. Those who are interested in the inquiry would do well to consult also the *Dissertation on the Nature of true Virtue*, and the notes in which the Editor endeavours to vindicate the definition above quoted. The attempt, however, is to no purpose. In bad hands the definition has led to base consequences: and in no hands can it lead to any good, as it is not fitted to the nature of man. It is in vain to tell us that the love of our neighbour and our country, *if detached from a tendency of affection to universal being, is not truly virtuous—That attachment to an object, not founded on the comparative value of that object, belongs not to the nature of true virtue—That a heart enlarged to the love of being in general, includes all particular objects; and is then only capable of virtuous love*, when the attachment to each object is *for the sake of the whole system of being*. There is, I repeat, neither truth nor practical wisdom in all this. The particular affections are virtuous, because they are manifestly in accordance with the will of God. By their exercise our higher capacities are matured; without their exercise, no moral virtue could ever germinate. Suppose a man to reach a high grade of moral virtue; is he then called on to throw down the very scaffolding by which he mounted—to strip himself of all the feelings which have manifested themselves in his heart from the first dawns of his moral nature? He is called on to make no such sacrifice: and were he called on, the sacrifice would be impossible*. High

* Many other examples of the evil effects of *a priori* reasoning on moral questions might be found in the works of Jonathan Edwards. He was an acute, honest, and pious man, and a most intrepid reasoner:

principle directs and controls the capacities and affections of our moral nature, but compels us not to root them out.

5. Under the preceding heads, I have considered the principles laid down in the first book of Paley's Moral Philosophy. The fundamental propositions of his system are drawn out in the second book: but they have been examined in so much detail in the preceding discourse, that it is unnecessary to go over the same ground again. Some one may, however, ask, how the principle of utility can be rejected, if such a well-digested moral system can be built upon it. We may reply as follows, to such a question:

First. That in moral, as in physical philosophy, there has been no end to plausible hypotheses; and that the ingenuity of man has never wanted plausible arguments to support a system.

Secondly. That many parts of Paley's system relate to questions of (what may be called) legal ethics, having no other basis than the general good.

Thirdly. That it calls in the aid of Scripture rules—though these rules are not derived from principles in common with itself.

Fourthly. That God is a moral Governor of the world—Or in other words, that the rules of conduct derived from man's moral nature, and from the declarations of the word of God, have a general *tendency* to secure our worldly happiness. But we have no right, on this account, to invert the order of our moral reasoning—to put consequence in the

soner: fearlessly accepting the conclusions (no matter how startling) to which he was carried by deductive reasoning from the principles he accepted. For an instance of this kind I may refer the Reader to the new edition of his works. *Vol. VII. p. 480. London 1817.*

place of cause—to look only to the worldly effects of actions, and overlook their principles. Such a system places us in a false position, supposes us gifted with a power of tracing consequences which belongs not to our nature, blunts our perceptions of moral truth, and leads many men to make a wreck both of common principle and common sense. In natural history and natural philosophy, we see beautiful examples of contrivance and adaptation. But who would ever think of making contrivance the first principle of arrangement in natural history ; or adaptation, the foundation of physical science ? In these sciences, at least, all men have acknowledged the necessity of separating primary cause from secondary consequence. And why should they not be bound by the same principles in moral reasoning ?

6. In despite of a bad system, Paley was saved, by the rules he derived from Scripture (as well as by extraordinary good sense, and the kind feelings of his moral nature), from many great mistakes in the application of his principles. Sometimes, however, his system led him to play into the hands of bad men ; and to take low grounds of reasoning, but ill suited to the high tone of a christian moralist. I will not dwell at any length on examples of this kind : but it is important for my present object to point out some of them.

(1) The first example of the base conclusions of a utilitarian system of morals, occurs among the practical observations in the chapter on Virtue. It is only necessary in this place to request the reader to reperuse the remarks at p. 67 of this Discourse, as well as the note affixed to it.

(2) A most offensive instance of sacrificing common honesty and common sense, to nothing

better than utilitarian special pleading, may be seen in Book III. Chap. xxii. on *Subscription to Articles of Religion*. These Articles may be true or may be false—to demand our subscription to them may be wise or unwise—these are not the questions. But shall a man seek the emoluments of a sacred office, and pledge himself before God to perform the duties of it in conformity with the word and spirit of these Articles; and then forget them altogether, or try to blind his conscience by poring over the *inky blots and rotten parchment bonds* that are piled among the archives of our parliament? An act of parliament may give the legal sanction to these Articles; but it gives them not their meaning; which can be found only in the vulgar way of honest interpretation. The preceding instances are taken from the moral part of Paley's work—The following are derived from the political part; where the principle of utility may (for obvious reasons) be applied with much more safety, and sometimes with great advantage.

(3) Why is it our duty to obey the civil government? Paley replies, *because it is the will of God as collected from expediency so long as the established government cannot be resisted or changed without public inconveniency, it is the will of God that the established government be obeyed—and no longer. This principle being admitted, the justice of every particular case of resistance is reduced to a computation of the quantity of danger and grievance on one side, and of the probability and expense of redressing it on the other. But who shall judge of this? We answer, every man for himself**. A more loose and mischievous doc-

* Moral and Political Philosophy, Book VI. Chap. iii.

trine—one more certain to be turned to base purposes by bad men—was never, I believe, upheld by any christian moralist. In times of excitement, men are too much blinded by passion ever to enter fairly on a computation of civil grievance: and as for danger—brave men of sanguine tempers are not restrained by it, but on the contrary, are urged by it into action. On Paley's principles, civil obedience cannot continue to be regarded as a duty: and if civil order be retained at all, it can only be through selfishness and fear on the one hand, and by corruption and brute force on the other. Such a state of things can only lead to ruin and confusion, or the establishment of a despotic executive.

An unbeliever may ground his duty of obedience in expediency: but a Christian finds, in the word of God, a ready answer to the question we started with. Obedience to the civil government is a duty, because the word of God solemnly and repeatedly enjoins it. But does this doctrine lead us to the slavish maxims of *non-resistance and passive obedience*? Undoubtedly not. The Apostles of our religion gave us an example and a rule for the resistance of a Christian. They resisted not the powers of the world by bodily force; but by persuasion, by patient endurance, and by heroic self-devotion: and the moral and civil revolutions, which they and their followers effected, were incomparably the most astonishing that are recorded in the history of man.

Should it, however, be said, that ordinary men, not having the powers given to the inspired Apostles, must, on that account, adopt less exalted maxims as their rules of life: we may state in general terms (without loading this discussion with extreme cases which lead to no practical good in

moral speculation), that where the christian religion prevails in its purity, it is impossible there should ever exist an unmitigated despotism : and where the power of the executive is limited (in however small a degree) there will always be found within the constitution some place where the encroachments of bad and despotic men may be met by a moral and legal resistance. Rebellion is proscribed by human law, and is forbidden by the law of God. But a moral opposition to the executive, conducted on constitutional grounds, is proscribed by no law, either of God or man : and if it be wisely and virtuously carried on, it has in its own nature the elements of increasing strength, and must at length be irresistible. If, however, during the progress of a state, the constituted authorities be in open warfare with each other ; a good man may at length be compelled to take a side, and reluctantly to draw his sword in defence of the best inheritance of his country. Such an appeal, to be just, must be made on principle ; and after all other honest means have been tried in vain.

Unfortunately, the opposition to the encroachments of arbitrary power, has too often been commenced by selfish men for base purposes. Instead of taking their stand in a moral and constitutional resistance—instead of trying, by every human means, to concentrate all the might of virtue and high principle on their side, they have broken the laws of their country, dipped their hands in blood, and needlessly brought ruin on themselves and their party. The vices of the subject are not only the despot's plea, but the despot's strength. Where the virtuous elements of social order are wanting in the state, whether men be willing slaves or not, they are unfit for freedom.

(4) In the Chapter *On the British Constitution** we may I think find some examples of mere utilitarian reasoning, where the author ought (in part at least) to have taken the higher ground of a moral philosopher. It is impossible to deny that there is in this chapter much good sense and sound reasoning. Reviewing the popular part of our constitution, he points out the vast advantages we have derived from it, and the contingent evils of any material change in the system of popular representation. But, the corruption—the perjury—the baseness connected with the system—the mean shifts to which great men were compelled by it to stoop—the chance that the very fountains of law and honour might become polluted by it—the never-failing topics of offence it held out to discontented and designing men—these things are all passed over, though in the eyes of some they seemed to form a deadly canker in the state. Had he considered these flagrant evils; and then shewn that, while men continue what they are—little better than the slaves of their bad passions—any other system might bring along with it, as great, or perhaps greater, moral evils, he had done well. His conclusions might have been right or wrong; but his argument would have been, not only more complete, but placed on higher and truer grounds.—I am offering no opinion on any subject discussed in this chapter; the attempt would be entirely out of place in this note. My object is, not to examine the weight of Paley's arguments, but his tone of arguing.

(5) Near the end of the Chapter *On Crimes and Punishments*, is the following sentence†.

* Moral and Political Philosophy, Book vi. Chap. vii.

† Ibid. Book vi. Chap. ix.

Another maxim which deserves examination, is this:—"That it is better that ten guilty persons escape, than that one innocent man should suffer." If by saying it is better, be meant that it is more for the public advantage, the proposition, I think, cannot be maintained. It would, I believe, be an easy task to prove that this conclusion is wrong on Paley's own principles. We are, at least, certain that it contradicts the moral feelings of mankind, and this is quite enough to condemn it.

No man perhaps ever used the disjunctive form of reasoning with more advantage than Paley. It sometimes however led him into error. The worst example of this kind has been considered in a former page of this discourse*: another occurs in the chapter just quoted. *There are (he observes) two methods of administering penal justice—The first method assigns capital punishments to few offences, and inflicts it invariably—The second method assigns capital punishments to many kinds of offences, but inflicts it only upon a few examples of each kind.* All this is true—But when he argues as if there never had been, or could be, any other methods besides these two; his conclusions (whether true or false) are not derived from any rules of sound logic, and are open to a charge of sophistry. This last remark is not however of much importance, and bears not directly on my present object.

From all that has been stated above, we may conclude, that Paley was wrong in overlooking the innate moral capacities of our nature—that the principle of utility is derived from false reasoning—that it places man in a false position—lowers his standard of right and wrong—and inevitably leads him,

* See above, p. 62.

whether in speculation or practice, into false and unhallowed consequences. In accepting these conclusions, we merely assume, that man has a moral nature; and that, in almost every act of his life, his perception of right and wrong is incomparably clearer, than his knowledge of the general consequences that may follow from the act itself.

NOTE (F), p. 95.

IN the preceding discourse, as well as in the notes affixed to it, my object has been to teach, as far as I am able, the junior Members of the University to think correctly on the more important branches of academic study. The mere building up of knowledge is labour ill bestowed, if not followed by improved habits of thought. But no man is passive during the acquisition of such habits. They exist only where the best powers of the mind have been steadily employed in their formation. This is a law affecting every human being. Perfection (in the limited sense in which the word can be used in speaking of the feeble powers of man) comes only by continued and well-applied labour: and the remark bears on our moral condition as well as our intellectual.

The studies of mankind have sometimes been divided into natural, moral, and religious. Each branch requires its appropriate training, and yields its own peculiar fruit. A study of the natural world teaches not the truths of revealed religion, nor do the truths of religion inform us of the in-

ductions of physical science. Hence it is that men, whose studies are too much confined to one branch of knowledge, often learn to overrate themselves, and so become narrow-minded. Bigotry is a besetting sin of our nature. Too often it has been the attendant of religious zeal: but it is perhaps most bitter and unsparing when found with the irreligious. A philosopher, understanding not one atom of their spirit, will sometimes scoff at the labours of religious men; and one who calls himself religious will perhaps return a like harsh judgment, and thank God that he is not as the philosophers—forgetting all the while, that man can ascend to no knowledge, except by faculties given to him by his Creator's hand, and that all natural knowledge is but a reflexion of the will of God. In harsh judgments such as these, there is not only much folly, but much sin. True wisdom consists in seeing how all the faculties of the mind and all parts of knowledge bear upon each other, so as to work together to a common end; ministering at once to the happiness of man and his Maker's glory.

Again, a man may be skilled in many branches of knowledge; and yet his affections may be wrong-placed and his bad passions unsubdued. Our conduct in each instance in which we are called on to act, is mainly determined by the feelings and thoughts excited by the things around us. One man pursues natural knowledge, but soars not in imagination beyond material phenomena. Another sees the indications of design, and perhaps goes on to mark the wise adaptation of the various parts of the material world. A third, while contemplating the world around, thinks nothing of these things; but his imagination takes wing, and his soul is

borne away in poetical emotion. A fourth feels with greater or less power what all the others feel, but adds to it a movement of thankfulness to the Giver of all good; and this new feeling, when joined to a firm belief in the word of God, blends itself in the animating principle of christian love. Contrasts such as these in the emotions of our inner nature while we are under the same external conditions (and every hour's experience shews us examples of them in some form or other), arise from different habits of the soul, whether we regard them as moral, intellectual, or religious. But such habits, I repeat, have been gained only by appropriate training. If they be intellectual, they have been gained by intellectual toil: if religious, they have come only by well-directed religious studies and religious exercises.

After every new combination, the properties of matter are essentially changed, and present a new set of phenomena. It is not, perhaps, too much to say, that, in like manner, after every new act or voluntary thought, the soul is put in a new psychological condition. Its powers of doing or forbearing are changed: for things are ever after present to it in the memory, and brought out by the associating principle, in new intellectual combinations. We know the inveteracy of habits; and it is mainly through the associating principle that they gain their strength. By every fresh commission of sin, we lose both the power and the inclination to escape from the bondage of bad passion: for the storehouse of the memory becomes tenanted by images of darkness, mingling themselves with the recollections of past good, and tempting us on in the way of evil. Acts of forbearance done on principle give us, on

the other hand, new inclinations and new capacities for virtue. The mind becomes stored with remembrance of moral victories; the associating principle is then the source of happy recollections and good resolves; and above all, the soul is taught to seek for strength where it is to be found—in the fountain of all goodness. And thus a good man learns, at length, to do without effort, and with inward joy, what another, were he to give the whole world for the power, has no possibility of performing.

If such be the conditions of our being, and such the relations of our thoughts to the things around us, a good training and the commencement of good habits in early life must be matters of inexpressible moment. This is equally true whether, according to the bent of our minds, the question be considered in a metaphysical or a religious point of view. The remark is by no means confined to our intellectual capacities—It applies with fuller meaning to our moral and religious sentiments—to all those feelings of the soul which call our moral powers into visible activity. A philosopher may be cold-hearted and irreligious—a moralist may be without benevolence—and a theologian may be wanting in the common charities of life. All this shews that knowledge is not enough, unless feelings and habits go along with it, to give it its meaning, and to carry it into practical effect. Religion reaches the fountain-head of all these evils; and she alone gives us an antagonist principle whereby we may effectually resist them.

In natural knowledge we may mount from phenomena to laws; but in doing this we are held by fetters we cannot break—we cannot alter one link in the chain of natural causes—we can only mark the traces of an unvarying power, external to ourselves,

and to which we are ourselves in bondage. If this be our condition in acquiring natural knowledge, what right have we to think, that in gaining religious knowledge we are permitted to be more free?—That in regard to our spiritual relation to God and a future state we may indulge in any fantastical notions we think fit; while we shut our eyes to the light that he has given us, and despise the law that he has set before us? Madness and folly like this, in any one professing to be a Christian (and to Christians only is this Discourse addressed), would be utterly incredible, did we not see it every moment before us, and did we not find all its elements lurking within our own bosoms.

But if the Bible be a rule of life and faith—a record of our moral destinies—it is not (I repeat), nor does it pretend to be, a revelation of natural science. The credibility of our religion depends on evidence, internal and external. Its internal evidence is seen in the coherence of its design from its first dawning to the fulness of its glorious light—in its purity and moral dignity—in its exalted motives fitted to call forth man's highest moral and intellectual energies—in its suitableness to his wants and weakness—in its laying bare the inner movements of his heart—in its declarations of the reality of a future state, and of other truths most important for him to know, yet of which he has but a faint and insufficient knowledge from the light of nature. Its external evidence mingles itself in a thousand ways with the internal; but finally resolves itself into the strength of human testimony, proving that God has at many times made a visible manifestation of his power on earth; promulgating among mankind a rule of life, enforcing it by the terror of penal sanc-

tions, and confirming it by miracles publicly wrought in attestation of its truth. Physical science, on the contrary, derives no support from internal evidence or external testimony : but it is based on experiment alone, is perfected by induction, and is drawn out into propositions by a rational logic of its own. To confound the groundworks of philosophy and religion is to ruin the superstructure of both : for the bases on which they stand, as well as their design, are absolutely separate ; and we may assume it as an incontrovertible truth, that the inductions of philosophy can be no more proved by the words of revelation, than the doctrines of Christianity can be established by the investigations of natural science.

Should some one ask how men can overlook truths like these after they have been once enunciated : we may reply, that men have often been led into such folly by vanity and arrogance—the one shutting from their senses the narrow bounds of their own ignorance—the other teaching them to condemn what they do not comprehend. Another source of error, on physical questions, has been a mistake respecting the import of certain scripture phrases. These writings deal not in logical distinctions or rigid definitions. They were addressed to the heart and understanding, in popular forms of speech such as men could readily comprehend. When they describe the Almighty as a being capable of jealousy, love, anger, repentance, and other like passions, they use a language accommodated to our wants and capacities, and God is put before us in the semblance of humanity. They tell however what it is essential for us to know—our relations and our duties to him, and the penalties of disobedience : and were it possible for them to make even an

approach to the perfections of his glory, no man could by looking on them comprehend their meaning; and they would be at once unfitted to be the vehicle either of religious truth or moral rule. If this principle of interpretation be adopted in numberless parts of scripture describing the moral attributes of God; we may surely extend it to other passages (unconnected with any religious doctrine, and therefore of comparatively small importance) in which the fabric of the material world is the subject of some passing allusion or figurative illustration.

A philosopher may smile at the fulminations of the Vatican against those who, with Copernicus, maintained the motion of the Earth: but he ought to sigh when he finds that the heart of man is no better than it was of old, and that his arrogance and folly are still the same—that bigotry and ignorance still go hand in hand, and are ever ready to entrench themselves in any lurking-place, whence they may assail with maledictions and words of evil omen all those who are enjoying a light of truth their eyes cannot bear to look upon. There are still found some who dare to affirm that the pursuits of natural science are hostile to religion. An assertion more false in itself, and more dishonourable to true religion, has not been conceived in the mind of man. Of other sciences I am not called on to speak; but having, in the former pages of this Discourse, described some of the general truths brought to light by Geology, I may be permitted to add a few words in its vindication.

The Bible instructs us that man, and other living things, have been placed but a few years upon the earth; and the physical monuments of the world bear witness to the same truth. If

the astronomer tells us of myriads of worlds not spoken of in the sacred records; the geologist in like manner proves (not by arguments from analogy, but by the incontrovertible evidence of physical phenomena) that there were former conditions of our planet, separated from each other by vast intervals of time, during which man, and the other creatures of his own date, had not been called into being. Periods such as these belong not, therefore, to the moral history of our race; and come neither within the letter nor the spirit of revelation. Between the first creation of the earth and that day in which it pleased God to place man upon it, who shall dare to define the interval? On this question scripture is silent: but that silence destroys not the meaning of those physical monuments of his power that God has put before our eyes; giving us at the same time faculties whereby we may interpret them and comprehend their meaning.

In the present condition of our knowledge, a statement like this is surely enough to satisfy the reasonable scruples of a religious man. But let us, for a moment, suppose that there are some religious difficulties in the conclusions of Geology. How then are we to solve them? Not by making a world after a pattern of our own—not by shifting and shuffling the solid strata of the earth, and then dealing them out in such a way as to play the game of an ignorant or dishonest hypothesis—not by shutting our eyes to facts, or denying the evidence of our senses: but by patient investigation, carried on in the sincere love of truth, and by learning to reject every consequence not warranted by direct physical evidence. Pursued in this spirit, Geology can neither lead to any false conclusions,

nor offend against any religious truth. And this is the spirit with which many men have of late years followed this delightful science—devoting the best labours of their lives to its cultivation—turning over the successive leaves of nature's book, and interpreting her language, which they know to be a physical revelation of God's will—patiently working their way through investigations requiring much toil both of mind and body—accepting hypotheses only as a means of connecting disjointed phenomena, and rejecting them when they become unfitted for that office, so as in the end to build only upon facts and true natural causes—All this they have done, and are still doing; so that however unfinished may be the fabric they have attempted to rear, its foundations are laid upon a rock; and cannot be shaken, except by the arm of that Being who created the heaven and the earth—who gave laws to the material world, and still ordains them to continue what they are.

But there is another class of men who pursue Geology by a nearer road, and are guided by a different light. Well-intentioned they may be, but they have betrayed no small self-sufficiency, along with a shameful want of knowledge of the fundamental facts they presume to write about: hence they have dishonoured the literature of this country by *Mosaic Geology*, *Scripture Geology*, and other works of cosmogony with kindred titles, wherein they have overlooked the aim and end of revelation, tortured the book of life out of its proper meaning, and wantonly contrived to bring about a collision between natural phenomena and the word of God. The Buggs and the Penns—the Nolans and the Formans—and some others of

the same class, have committed the folly and the sin of dogmatizing on matters they have not personally examined, and, at the utmost, know only at second hand—of pretending to teach mankind on points where they themselves are uninstructed. Authors such as these ought to have first considered, that book learning (in whatsoever degree they may be gifted with it) is but a pitiful excuse for writing mischievous nonsense: and that to a divine or a man of letters, ignorance of the laws of nature and of material phenomena is then only disgraceful, when he quits his own ground and pretends to teach philosophy. Their learning (if perchance they possess it) has been but ill employed in following out the idle dreams of an irrational cosmogony: and they would be labouring at a task better fitted for their capacity, were they studying the simple and affecting lessons of Christianity, and trying to make its maxims of charity their rule of life.—A Brahmin crushed with a stone the microscope that first shewed him living things among the vegetables of his daily food. The spirit of the Brahmin lives in Christendom. The bad principles of our nature are not bounded by *caste* or climate; and men are still to be found, who, if not restrained by the wise and humane laws of their country, would try to stifle by personal violence, and crush by brute force, every truth not hatched among their own conceits, and confined within the narrow fences of their own ignorance.

We are told by the wise man *not to answer a fool according to his folly*; and it would indeed be a vain and idle task to engage in controversy with this school of false philosophy—to waste our breath in the forms of exact reasoning unfitted to

the comprehension of our antagonists—to draw our weapons in a combat where victory could give no honor. Before a Geologist can condescend to reason with such men, they must first learn Geology. It is too much to call upon us to scatter our seed on a soil at once both barren and unreclaimed—it is folly to think, that we can in the same hour be stubbing up the thorns and reaping the harvest. All the writers of this school have not indeed sinned against plain sense to the same degree. With some of them, there is perhaps a perception of the light of natural truth which may lead them after a time to follow it in the right road: but the case of others is beyond all hope from the powers of rational argument. Their position is impregnable while they remain within the fences of their ignorance, which is to them as a wall of brass: for (as was well said, if I remember right, by Bishop Warburton, of some bustling fanatics of his own day) there is no weak side of common sense whereat we may attack them. If cases like these yield at all, it must be to some treatment which suits the inveteracy of their nature, and not to the weapons of reason. As psychological phenomena they are however well deserving of our study; teaching us, among other things, how prone man is to turn his best faculties to evil purposes—and how, at the suggestions of vanity and other bad principles of his heart, he can become so far deluded, as to fancy that he is doing honor to religion, while he is sacrificing the common charities of life, and arraigning the very workmanship of God.

The recent attacks on physical science, and the gross misapprehension of its moral tendency, have been singularly wanton and ill-timed. The living

philosophers of this country are a set of sober-minded men, who have betrayed no hostility to revealed truth. An exclusive devotion to one subject inevitably makes a man narrow-minded; and a successful career of intellectual toil may make a man proud and full of self, and so take from him the best graces of a Christian character. But failings like these belong to the infirmities of our nature, and are not confined to any one profession or pursuit: they may be seen in the characters of sagacious lawyers or learned divines, as well as of laborious philosophers. It would, indeed, be ridiculous to say, that all living philosophers are religious men. Like their neighbours, they have their besetting sins: but many of them are men of pure lives and firm believers in revelation; and among them may be found some who shine forth as illustrious patterns of Christian holiness.

A sceptic may, indeed, think that the whole system of things, moral and physical, has no principle of continued rest—that it has only been jostled into a condition of unstable equilibrium, which may be destroyed by the first movement of any of the component elements. Such a one may reasonably fear the progress of discovery; for his system wants the essential principles of cohesion. But a sincere believer in the word of God has no fear of this kind: for he knows that all the parts of the natural world are wisely fitted together—that the Lord of all nature is a being *without variableness or shadow of turning*—and that truth, of whatever kind, as seen in the mind of man, is but a perception of his Maker's will.

A man of deep thought and great practical wisdom—one whose piety and benevolence have for

many years been shining before the world, and of whose sincerity no scoffer (of whatever school) will dare to start a doubt—recorded his opinion in the great assembly of the men of science, who during the past year were gathered from every corner of the Empire within the walls of this University, *that Christianity had every thing to hope and nothing to fear from the advancement of philosophy**. These are golden words, and full of meaning to those who have wisdom to understand them. But there are some to whom this great Assembly has been a topic of offence. They belong to a psychological class of their own; gifted indeed with very humble powers in following out true consequences, either moral or physical; but compensated, in return, with gifts of another kind. Like birds of bad omen they can croak of coming ills and smell corruption from afar; and by the powers of a new analysis—a perverted moral alchemy—they can extract evil out of good and dross out of gold.

Another indiscretion (far different however from the egregious follies I have just noticed) has been committed by some excellent christian writers on the subject of Geology. They have not denied the facts established by this science, nor have they confounded the nature of physical and moral evidence: but they have prematurely (and therefore, without an adequate knowledge of all the facts essential to the argument) endeavoured to bring the natural history of the Earth into a literal accordance with the book of Genesis—first, by greatly extending the periods of time implied by the six days of creation

* Speech of Dr Chalmers at the meeting of the British Association for the Advancement of Science. June, 1833.

(and whether this may be rightly done is a question only of criticism and not of philosophy)—and secondly, by endeavouring to shew, that, under this new interpretation of its words, the narrative of Moses may be supposed to comprehend, and to describe in order, the successive epochs of Geology. It is to be feared that truth may, in this way, receive a double injury; and I am certain that the argument, just alluded to, has been unsuccessful. The impossibility of the task was however (as I know by my own experience) a lesson hard to learn: but it is not likely again to be attempted by any good Geologist. The only way to escape from all difficulties pressing on the question of cosmogony has been already pointed out. We must consider the old strata of the earth as monuments of a date long anterior to the existence of man, and to the times contemplated in the moral records of his creation. In this view there is no collision between physical and moral truth. The Bible is left to rest on its appropriate evidences, and its interpretation is committed to the learning and good sense of the critic and the commentator: while Geology is allowed to stand on its own basis, and the philosopher to follow the investigations of physical truth, wherever they may lead him, without any dread of evil consequences; and with the sure conviction that natural science, when pursued with a right spirit, will foster the reasoning powers, and teach us knowledge fitted, at once, to impress the imagination, to bear on the business of life, and to give us exalted views of the universal presence and unceasing power of God.

The subjects discussed in this note are of great importance; and I am anxious to take away any

wrong impressions which may have been produced by the writings of a false and unphilosophical school. In the furtherance of this object (though at the risk of being taxed with the fault of egotism and useless repetition) I will add one more passage, taken from an anniversary address to the Geological Society, especially as it appears in the pages of a periodical work not perhaps accessible to all the readers of this Discourse.

“There have issued from the English press, within a few years, such dreams of cosmogony as I believe find no parallel in the recent literature of continental Europe. It would be in vain to point out to such authors the nature of our data, or the method of our inductions; for they have a safer and a readier road to their own conclusions. It would be in vain to tell them that the records of mankind offer no single instance of any great physical truth anticipated by mere guesses and conjectures—that philosophic wisdom consists in comprehending the last generalizations derived from facts each of which is only known by experiment and observation; and in advancing, by such means, to those general laws by which all things are bound together. They seem not to know that inventive power in physics, unlike inventive power in works of art or of imagination, finds no employment in ideal creations, and only means the faculty by which the mind clearly apprehends the relations and analogies of things already known; and is thereby directed and urged on to the discovery of new facts, by the help of new comparisons—that the history of all ages (and I might add, the written law of our being, where it is declared that by the sweat of our brow shall we gather up our harvest)

has proved this way of slow and toilsome induction to be the only path which leads to physical truth.

“Laws for the government of intellectual beings, and laws by which material things are held together, have not one common element to connect them. And to seek for an exposition of the phenomena of the natural world among the records of the moral destinies of mankind, would be as unwise as to look for rules of moral government among the laws of chemical combination. From the unnatural union of things so utterly incongruous, there has from time to time sprung up in this country a deformed progeny of heretical and fantastical conclusions, by which sober philosophy has been put to open shame, and sometimes even the charities of life have been exposed to violation.

“No opinion can be heretical but that which is not true. Conflicting falsehoods we can comprehend; but truths can never war against each other. I affirm, therefore, that we have nothing to fear from the results of our enquiries, provided they be followed in the laborious but secure road of honest induction. In this way we may rest assured that we shall never arrive at conclusions opposed to any truth, either physical or moral, from whatsoever source that truth may be derived: nay rather (as in all truth there is a common essence), that new discoveries will ever lend support and illustration to things which are already known, by giving us a larger insight into the universal harmonies of nature*.”

* *Anniversary Address to the Geological Society, ANNALS OF PHILOSOPHY, April 1830.*

Τῶν δὲ ἀτεκμάρτως ἔχόντων, ὅτου ἔνεκά ἐστι, καὶ τῶν φανερώς ἐπ' ὠφελείᾳ ὄντων, πότερα τύχης καὶ πότερα γνώμης ἔργα κρίνεις;—Πρέπει μὲν τὰ ἐπ' ὠφελείᾳ γενόμενα γνώμης ἔργα εἶναι.—Οὐκοῦν δοκεῖ σοι ὁ ἐξ ἀρχῆς ποιῶν ἀνθρώπους ἐπ' ὠφελείᾳ προσθεῖναι αὐτοῖς, δι' ὧν αἰσθάνονται, ἕκαστα, ὀφθαλμοὺς μὲν, ὥσθ' ὁρᾶν τὰ ὁρατὰ, ὦτα δὲ, ὥστ' ἀκούειν τὰ ἀκουστά; ὁσμῶν γε μὴν, εἰ μὴ ῥῖνες προσετέθησαν, τί ἂν ἡμῖν ὄφελος ἦν; τίς δ' ἂν αἰσθήσις ἦν γλυκέων καὶ δριμέων καὶ πάντων τῶν διὰ στόματος ἡδέων, εἰ μὴ γλῶττα τούτων γνώμων ἐνεργάσθῃ; Πρὸς δὲ τούτοις, οὐ δοκεῖ σοι καὶ τόδε προνοίας ἔργῳ εἰκέναι, τὸ, ἐπεὶ ἀσθενὴς μὲν ἐστὶν ἡ ὄψις, βλεφάροις αὐτὴν θυρῶσαι, ἃ, ὅταν μὲν αὐτῇ χρῆσθαι τι δέῃ, ἀναπετάννυνται, ἐν δὲ τῷ ὕπνῳ συγκλείεται; ὥς δ' ἂν μὴδὲ ἄνεμοι βλάπτωσιν, ἡθμὸν βλεφαρίδας ἐμφῦσαι· ὀφρυῦσί τε ἀπογεισῶσαι τὰ ὑπὲρ τῶν ὀμμάτων, ὥς μὴδ' ὁ ἐκ τῆς κεφαλῆς ἰδρὼς κακουργῇ· τὸ δὲ τὴν ἀκοὴν δέχεσθαι μὲν πάσας φωνάς, ἐμπίπλασθαι δὲ μήποτε· καὶ τοὺς μὲν πρόσθεν ὀδόντας πᾶσι ζώοις οἴους τέμνειν εἶναι, τοὺς δὲ γομφίους οἴους παρὰ τούτων δεξαμένους λεαίνειν· καὶ τὸ στόμα μὲν, δι' οὗ ὧν ἐπιθυμεῖ τὰ ζῶα εἰσπέμπεται, πλησίον ὀφθαλμῶν καὶ ῥινῶν καταθεῖναι· ἐπεὶ δὲ τὰ ἀποχωροῦντα δυσχερῇ, ἀποστρέψαι τοὺς τούτων ὀχετοὺς, καὶ ἀπενεγκεῖν, ἢ δυνατόν προσωτάτω, ἀπὸ τῶν αἰσθήσεων· ταῦτα οὕτω προνοητικῶς πεπραγμένα, ἀπορεῖς. πότερα τύχης ἢ γνώμης ἔργα ἐστίν;—Οὐ μὰ τὸν Δί', ἔφη, ἀλλ' οὕτω γε σκοπούμενῳ πάνυ ἔοικε ταῦτα σοφοῦ τινὸς δημιουργοῦ καὶ φιλοζώου τεχνήματι.