

6 The night in which this lecture (Feb 5. 71) being stormy, and us having what I had hoped, The following is part of what was read on that occasion. On Mch. 5th made a new introduction & other modifications & delivered as is, the lecture accordingly.

The God of Nature and the God of revelation
are identical. —

Our object in the following discourse is to show that what science reveals respecting God, and what revelation presents, are not contradictory. That the God that nature presents as an object of adoration is the very same that the Bible presents not only as the object of adoration, but of love, not only as an object of wonder, but as the kind and merciful Father of us all.

It is well known that many men eminent for their scientific knowledge, in our own country, and in England & France and Germany - seem zealous in their efforts to make the revelations of science contradict the word of God. They are not contented with the candid presentation of what seems to be the truth, and their ^{own} deductions of that truth, which sometimes in a very striking manner seem to contradict the scriptures, but they seem to take pleasure, in their attempt, to make science the foundation of that religion, which has cheered so many in life and at death, and has done so much for the civilization of the nations of the earth, & we may add too, has ~~rendered~~ ^{done} so much, to render possible the accumulation and diffusion of that very science, which they make use of, for its overthrow.

There is something, ^{however} we think, that may be said by way of apology for scientific men, that a good deal of the bad feeling they have with re-

gave to revealed religion, arises from the course pursued by religionists, who have a zeal for God but not according to knowledge - well meaning men they ~~be~~ may have been, and learned too, though unfortunately they understood neither science nor the scriptures, They saw contradictions where no contradictions existed, and when they had the power made the philosophers suffer in the flesh, who dared to teach doctrines contrary to the teachings of the church. Scientific men finding themselves condemned, and held up to scorn as heretics and infidels, for teaching what they knew to be truth, and for interpreting correctly God's other book the book of Nature would naturally feel a contempt for those who condemned them, and suppose that their opponents, ought to understand the scriptures which they had made their especial study, would be disposed to reject ^{the sacred books} ~~it too~~, on the ground that God, the God of truth, would not say one thing in his word and a different thing in his works.

Neither ought we to condemn Xteans in old times for the jealous care they manifested for the authority of the Sacred Scriptures. For it must be admitted that there are apparent contradictions between science and the ~~ss~~. Nor is it always easy to see how these seeming discrepancies are to be reconciled. Take for example the Copernican theory of the universe, first presented to the world in the year 1543 by Copernicus, now every where



received as true, & which very few think of doubting &
 nearly all believe, because they are taught to believe it
 in early life, and because those who are regarded as au-
 thority in these matters thus teach. We will find that
 at the time, Galileo was condemned by the Holy Inquisi-
 tion, there was more to be said against Galileo, than
 in his favor - - This theory affirms that the sun
 stands still and the earth moves around it once a
 year, at the same time revolving around its axis once
 a day, & that the world is a heavenly body of the same
 order as the beautiful evening or morning star
 or the planet Jupiter just now (Feb 5th 1871) shining
~~out~~ in his splendor at his meridian altitude.
 or the evening star, which is just about this time setting.
 It was said at the time of Copernicus, and perhaps
 some, who have not kept up with the times, may still
 be saying - What is all this? Is not seeing believing?
 Do we not see that the sun moves and the earth
 stands still? Does any one feel that the earth is mo-
 ving? Has the Creator given us senses to deceive us?
 Do not the Scriptures teach us differently? Hear what
 they say - "God causeth the sun to arise both on the good
 and bad. (Mat 5) ~~Let not the sun go down upon your
 wrath. Eph 4.~~ (Joshua said "Sun stand thou still
 & the sun stood still & the moon stayed until the
 people had avenged themselves of their enemies" (Joh x. 12)
 The sun went back ten degrees - the dial of Ahas (2Kg xx)
 The sun rejoices as a strong man to run his race. (Ps XIX

The sun ariseth and the sun goeth down & hethereth
to his place where he rose, Ecc. 1. 3.

~~Fear before him all the earth, The world also shall~~
~~be stable that it be not moved.~~ 1. Ch. 46, 30 - Ps. 105
Prov. 8. The world also is startled that it cannot
be moved. - Is it any wonder then that Passing by
many other passages of similar import, is it to be
wondered that this then new revelation of science
should be condemned as contradicting not only common
sense but the sacred scriptures? ^{Is it to be wondered}

that the holy Inquisition, that careful ^{unfallible} guardians of
faith and morals, should condemn the book of
Copernicus teaching such heresy, and should make
old Galileo recant. (P. P. Father De Chales S.J. states
that the inquisition at first prohibited the book of
Copernicus. Afterwards, it permitted it, when cor-
rected, ^{to read} that is when Copernicus had removed all pas-
sages from it where he absolutely asserted that the
world moved, & that the book in his time 1570 ±
presenting the theory of Copernicus only as an hypothesis
was not prohibited. - The same author, De Chales, states
with regard to Galileo, that because he seemed to incline
too much to the opinion of Copernicus, was ~~condemned~~ ^{fenced}
to condemn such a opinion, & the Holy Inquisition
decided, that the proposition ^{was} That the sun is the cen-
ter of the universe and is immovable with local motion
is a proposition false and absurd in philosophy & for-
mally heretical. - In this connection it might
not be ~~right~~ out of place to refer to the commen²

tary of the learned Jesuits Lescar & Jaquier, on
 Newton's Principia, at the commencement of which
 they state, that the Principia could not be explained
~~unless~~ on the Copernican theory, & that they therefore
 espoused this hypothesis, while they professed to be-
 lieve in the laws passed by the church with reference
 to the motion of the earth, that is they professed to
 believe as true what they knew to be false, for they
 could not read the Principia, without being convinced
 of the truth of ^{the new universals} received theory of the earth, ~~either~~.)
 Suppose these infallible doctors, could have had all
 things their own way, and men like Copernicus
 & Galileo kept ^{altogether} from promulgating their results
 of their investigations, what would have been the con-
 dition of science now. We would still have been
 in the midnight of the dark ages. As the head of
 this church is now, and always has been infallible -
 we presume that these decisions with respect to the
 motion of the earth are in force still. -

~~But however we to reconcile the plain teachings~~
~~of God's word, with such revelations of science~~
 But it was not only the doctors of the infallible
 church, who were alarmed by the developments of
 science, and looked with suspicious eyes & frowning
 brows on men devoted to the study of the natural world.
 Protestant doctors united with Rome Catholics, in
 condemning the apparently heretical teachings of
 science. - We do not find fault with either, for
 being startled and offended at these ^{strange} revelations of sci-

~~see~~, which seemed so palpably contradictory of
the written word, nor for ^{thinking} ^{the study of Nat. Phil.} feeling perhaps, that ~~science~~
led to infidelity, it was natural that they should do
so, just as natural as that the Jews in different parts
of the Roman empire, would be startled and offended, and
look with suspicion on the apostles, when preaching
the new doctrines of Christianity, and presenting the old
dispensation, with its long cherished and sacred ritual as
having come to an end. No wonder that their feelings
were aroused. When Paul and Silas went to Thessalonica
and preached Christ Jesus, the Jews that believed not,
gathered some lewd fellows of the baser sort, and attack-
ed the house of their host Jason. They dragged Jason
before the rulers as the entertainer and abettor of these
men who ^{had} turned the world upside down, and ^{were} ^{do} ^{ing} things
contrary to the decrees of Caesar. Paul and Silas were
informed escaped in the night and went to Berea.
We are told that these Bereans were more noble
than those of Thessalonica, they did not storm and rage
but heard what the apostles had to say. with all readi-
ness of mind, no doubt ^{at first} thinking their doctrine hetero-
dox, but we are told that they searched the scriptures
daily to find out whether these things are so. They ac-
ted, like Protestants ought to act. they appealed to the
proper authority, to the ss, to prove a scripture ques-
tion, and were guided accordingly. that is finding that
the apostles were right they believed. So Protestants
as a general thing, not being bound to ~~the~~ submit to
the so called infallible decisions of fallible men, ~~with~~

exercising their right to think for themselves, & to prove
 all things and hold fast that which is good, appeared
 in these matters of science, not to the revelation of
 his will which we have in the SS. but to the re-
 velation of his works which we have in nature.
 An appeal to this ^{soon} convinced them, that Galileo
 was right, & the Pope was wrong - But how are
 we to reconcile the ~~ex~~ plain teachings of the word of
 God, as already presented, with these discoveries of sci-
 ence. - In this way - First, It must be kept in
 mind that God never ^{intended that} designed the Bible should
 teach us science. Its great object is to show man
 his moral condition - a punier by the fall of Adam,
 & to point out the way of salvation by a crucified
 Redeemer - or in other words, to enable man to know
 himself - & to understand the relation in which he stands
 to God, & his responsibilities to him, & to teach him how
 eternal happiness may be attained, every thing else
 we think, in the Bible is subordinate to these great
 points. God gave man a mind capable of investiga-
 ting the laws of the material universe, God does not
 do for man what ~~he~~ man can do for himself. Man
 could never find out what the Bible reveals with re-
 spect to our moral relation to him, hence he has
 made this known by a special revelation. The laws
 of nature ~~are as far as they are necessary to be known~~
^{on the other hand} for the comfort and well being of man in this life, &
 as still further than this, man can discover without
 a supernatural revelation, hence no revelation is given

and he is left to read this book for himself. and
 Secondly, affirming that there can be no contradiction
 between the words and works of God, as we know that
 facts are stubborn things & cannot be made, if they
 are really facts to yield, we must enquire, and as we
 know that there is nothing more difficult than to
 express our thoughts in language incapable of miscon-
 struction, we must examine them whether or not we
 have properly understood the purport of the language in
 which these seeming contradictions occur. By way
 of illustration of this want of precision in language, even
 where precision is looked for, we present the following. In
 teaching astronomy, ^{it was} said, "The sun, young gentlemen, rises
 in the ~~or~~ east ^{and} not perpendicularly from the horizon
^{towards the South} but obliquely, and moves upward ~~towards the~~ to the
 Meridian & then ~~to~~ sets in the west. Not long after
 I took occasion to tell ^{the class} ~~them~~ that the sun came later
 to the meridian than the stars did, & the reason was
 as every body knows, that the sun moves ^{in his orbit} from the west
 to the east, ~~in its annual motion~~. Here was an interrup-
 tion, didn't I mean from east to west? & the answer was
 no, of course not. Soon after, it was said, that the
 sun did not move at all, but that the earth moved
 and that the motions of the earth ~~only~~ made the sun
 seem to move from east to west, & from west to east.
 What is all this, please, you had the sun moving from east
 to west, a little while ago, and then from west to east,
 and now you have stopped it altogether & what
 does it do? & which way does it go? Of course we cannot

8

go into minute explanations of all this, but simply state, that it is sometimes convenient ^{even} for the astronomer, to speak not according to absolute fact, but according to appearance. Even a scientific truth loving Friend, who for fear of calling any man Master, would not say Master, would never think of saying, that the eastern horizon sunk beneath the sun's center at such an hour in the morning when he wanted to give the hour of sun-rise. What we have presented shows us that ^{often} there are several things to be looked at besides the plain literal meaning of words, before we get the right understanding of what is expressed. Applying this to the case before us, it is it to be wondered, that if learned and truth loving astronomers, ~~speak~~ use language which does not exactly represent facts but appearances, & that it would be pedantry & folly for them to use any other, and that, in ancient times, ~~these~~ ~~spoke~~ ^{if} the sacred writers spoke of natural phenomena as they appeared, & not as they were, ^{remembering thus that} & this too, if they had spoken according to the reality, they would not have been understood. — What we have presented here, seems to us, to remove all the difficulty, good old divines in old times, ^{had} & perchance some good people in later times, ^{still have.} with respect to the Bible speaking of the earth as immovable and the sun like the strong man running his race. —

Many will remember ~~the~~ the alarm of some good people both ministers and laymen, when it was whispered among them, that some of the leading doctors of the church were beginning to doubt ~~the fact, that~~ what was once

universally received as a fact, that God was just six literal days in making the world. Certainly, it was said God who made the world knew better than the geologists how long it took him to make it, & what was to become of the Sabbath, if these days should be considered as periods of indefinite duration. -- We may refer to this interesting subject again; it will be sufficient to say, that few if any Theologians of any eminence now, a-days, believe that days of the first Chapter of Genesis were ~~literal~~ days of 24 hours each, & that they find the interpretation which science requires in no wise ~~con~~ⁱⁿ⁻consistent with the Mosaic record. --

We will now endeavor to present some things to show that what we may learn of God from his works, by science, is in remarkable accord with what he has revealed of himself in his word. --

As some men ~~have~~ of science, have run off into the extremes of Atheism and Pantheism, we ought perhaps to show that science does not necessarily lead in these directions, but as there are comparatively few, who have thus erred, the greater part believing in a the existence of ~~an~~ personal, intelligent, ~~and~~ eternal and controlling mind, & believing also, that all nature teaches this, our design as already stated is to show that this intelligent & controlling spirit corresponds in a remarkable degree to the God presented in the Bible. -- We should bear in mind that the Bible does not attempt to prove the existence of God. It assumes this as a matter of course, ^{Gen. 1:1} as a truth universally received, as written in the book of

Units of God, in works - in general
development -

See - a number of Warden.

put (in units of same) p. 29. 29

nature in plain characters, such as the mind of man can readily understand, & intelligently read, and God does not have recourse to the supernatural, when the natural will answer his purpose -

1. Let us ^{then} turn our attention to what science teaches ^{first} with respect to the ~~infinite~~ greatness of God. ^{Denihilis nihil}
We are aware that infinity, & eternity, are words superfluous of ideas, which the human mind can hardly not grasp, and hence our ideas of the infinite either in time or space are negative, we can conceive pretty well the space of a mile or ten miles, or perhaps a thousand miles - but when we get up to the hundreds of thousands & millions, we begin to ~~think~~, feel that we have no very definite idea of such distances, still we can work with representing these magnitudes, such numbers, & can reckon by, millions & thousands of millions & ~~representations~~ quite satisfactorily, without perhaps having any concrete idea of the magnitudes we are dealing with. But when any of these ~~magnitudes~~ has been definitely noted, or when we have conceived a body having moved ^a this distance, represented by ^{ten or twelve figures} these figures, ~~or even imagined as well as we can in our minds~~, we can easily ~~represent~~ imagine it, going further, & we can conceive no limit to this, & though we cannot take in this vast distance, we feel sure that it exists, simply from the fact that we cannot conceive of it not existing and thus we go on & on in our conceptions assured that we can never reach an end, & we believe in infinity, not because we can comprehend it, but simply because we cannot conceive of its not existing. (The same thing may be said of ^{eternity} ~~infinity~~ infinite times, of which we get all the ideas we have of it we can conceive of no time so distant in this part, that

we cannot suppose, a more distant time. ~~or in other~~
 words, we cannot conceive any limit to time either past or future.
~~by supposing a movement taking place at a certain rate~~
~~along this infinite line.~~ If we look in the other direction
 to the infinitely small either in space or time, we will find
 ourselves in the same difficulty, though we are generally in the
 habit of thinking that, though the infinitely great is out of our
 reach, that the infinitely small, is easy to imagine & easy
 to reach. Looking at the thought in one way perhaps it is.
 If we take a foot rule, & cut it off inch by inch, we will
 soon ~~be~~ bring it to nothing, but just before we get to nothing
 there was one inch remaining - suppose this length be divided
 into two, & what remains be halved, & so on, when will we
 get to the end of it? ~~we will find that there is always a half part of the last part remaining.~~
 In order to present the subdivision
 of time, we present an interesting illustration from science -
 we ourselves think that it is a demonstrated fact, perhaps as
 certain as that messages can be sent along the telegraphic wire
 in an incredibly short space of time. It is this, that the
 nervous fibril of the retina of the eye ~~is~~ probably standing on end
 like the pile on velvet, makes a single vibration under the influence
 of light, in, we might give it more accurately, but we present
 it in round numbers, the 500 million millionth, part of
 a second. A second, all know, by the tick of the clock, is
 not a long time, indeed it is our shortest unit of time,
 well, a second is to this small time in which this vibration
 - an accomplished fact, as much as the motion of a clock hand -
 as it were, an eternity. ~~in round numbers~~ 15000000 years is
 as much greater than a second, than a second is to the time
 of this motion which takes place, in the nerve, when light enters
 the eye. - ~~We have been dealing here with some abstract~~
~~chemical arrangement for the purpose of producing a useful~~
~~with regard to time and space, in order that we may~~

that fixes definitely any of these remote dates, but would simply state that there is good reason to believe, from the evidences presented by the investigations of Geologists in this world in which we live, that, ~~in the ordinary course of nature, & there is every reason to believe that it has been through the whole geological history of the world, invariable that we may regard millions of years to have elapsed since God laid the granite foundations of our mountains.~~ and it is very probable that in the first Chapter of Genesis instead of having a concise history of the work of six days we have a very concise history of the work of six periods each ~~of~~ ^{part of} consisting of many millenniums. As it is our design to show that Science does not contradict revelation, but rather corroborates it, it may not be out of place here to refer a little more particularly, to this account of the creation as given by Moses, in the light of modern science. And it is just here where there is the greatest apparent discrepancy. Many will remember well, when this new view, with respect to the great length, that it was necessary to give to the days of creation, in order to make the Theological and Geological record conspire, how jubilant some inclined infidels were in the evidence they thought they had that the Bible account was false, & how alarmed many good believers, both lay & clerical were, at these oppositions of science, & with what a scowl they looked upon men of science particularly the Geologists. We cannot do better than to present by way of quotation,

from the Geology of Dana, the cosmogony of the Bible which he tells us is essentially that brought out by Prof Guizot (of Princeton) in his lectures. — p. 743.

"There is one ancient document on Cosmogony, (i.e. the origin of the world), the opening page of the Bible, which is not only admired for its sublimity, but is very generally believed to be of divine origin, —

In the first place, it may be observed that this document if true, is of divine origin. For no human mind was witness of the events and no such mind in the early age of the world unless gifted with superhuman intelligence could have described such a ^{scheme} ~~scene~~ or, would have placed the creation of the sun the source of light to the earth so long after the creation of light, was on the fourth day, & what is equally singular between the creation of plants and animals when so important to both; and none could have reached the depths of philosophy in the whole plan.

Again, If divine, the account must bear marks of human imperfection, since it was communicated through man. Ideas suggested to a human mind by the deity would take shape in that mind according to its range of knowledge and modes of thought and use of language unless it were at the same time supernaturally gifted with the profound knowledge and wisdom adequate to their conception and even then they could not be intelligibly expressed for want of words to represent them. x x x x

After stating that the word day was in the first Chapter of genesis, is used to express different lengths of time,

from which it appears that there is no evidence done to the sacred record by making it refer to an indefinite period, he goes on to say

- "The order of events in the Scripture Cosmogony corresponds especially with that given in Geology. There was first a void and formless earth, this was literally true of the heavens and the earth, if they were," (as there is every reason to believe they were once) "in the condition of a gaseous fluid. The succession is as follows. 1 Light, 2 The dividing the ^{or fluids} waters below from the waters ^{or fluids} above the earth (3) The dividing the land and water on the earth. (4) Vegetation, which, Messrs appreciating the philosophical characteristic of the new creation, distinguishing it from previous inorganic substances defines, as that 'which has seed in itself.' (5) The sun moon and stars. (6) The lower animals those that swarm in the waters and the creeping and flying species of the land. (7) Beasts of prey ^{the mammals & some} - (8) Man. In this succession we observe not only an order of events like that deduced from science, there is system in the arrangement, and far reaching prophecy, to which philosophy could not have attained, however instructed.

The account recognizes in creation two great eras of three days each, an Inorganic & an Organic.

Each of these eras opens with the appearance of light the first light cosmical, the second light from the sun for the special uses of the earth.

Each era ends in a day of two great weeks, the