

THE CLAIMS  
OF  
DARWINISM

*Rationally and Scientifically considered  
in the light of*

DARWIN'S LIFE and LETTERS;

BEING A LECTURE DELIVERED IN MELBOURNE,  
26TH JULY, 1888,

BY

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# DARWINISM.



IT may, perhaps, be as well to mention that this particular subject was not of my choosing; but I readily acceded to the wishes of the committee that I should deliver a lecture on the now celebrated Darwinian theory, which has so powerfully influenced current opinion, and so largely moulded the advanced thought of this enlightened Nineteenth Century. I can honestly say that my desire is to be above every consideration save the ascertainment of positive truth—in other words, what things actually are; but I am not prepared to accept mere theorisings and guesses, much less palpable impossibilities, as scientific or any other kind of truth, however cleverly and ingeniously the counterfeit may be made to resemble the genuine. It will be my task this evening to calmly and dispassionately weigh Darwinism in the balances of reason and science, acknowledging what is true and rejecting what is false. “I speak as unto wise men; judge ye what I say.”

In order to prevent misunderstanding, I think it right at the outset to guard against the mistake of confounding Darwin's system with Darwin himself. Personally, Darwin was possessed of many estimable qualities, which I would be the first to recognise and the last to depreciate. He was amiable, humane, generous, kind-hearted, and devoted to the study of what he believed to be truth, however defective his notion of what was truth may have been. Yet, admitting all this, it would be unwise, on the other hand, to forget that not one of these excellencies, nor the whole of them put together, constitute a guarantee against error; nor, supposing them to be associated with erroneous tenets, do they make wrong views of anything less pernicious, but rather the more dangerous. This devotion to truth, however sincere, if the devotee's estimate of truth be one-sided, only renders, under the circumstances, its necessarily partial presentation so much the more calculated to mislead. Some of you may remember that I took the opportunity two years ago, in this very place, of pointing out the vast difference between the facts of science (every one of which I receive) and the theories of scientists (which must be taken for what they are worth,) both in the department of geology and biology; and all that has transpired since has fully corroborated every word I then uttered. We found on that occasion that the heterogeneous mass of conjecture *plus* verity which in our day passes in common parlance for scientific, when subjected to the winnowing ordeal of the sieve of fact, reveals an immense preponderance of hypothetical chaff, with comparatively few grains of proven wheat. This will be found to apply with still greater force to Darwin's scheme as a whole, where fact itself seems turned into

fiction, and fiction into fact. So much so, that I am satisfied, notwithstanding its wide acceptance, and in spite of the extravagant laudation almost everywhere accorded to it, Darwinism, like many another "ism" before it, has now had its day; and the time is not far distant when people will be utterly ashamed of having ever allowed themselves to be entangled and caught like flies in the evolutionary spider's web so plausibly but fancifully, though I doubt not sincerely, spun from the fertile brain of its late distinguished inventor. Indeed, it so happens that it falls to my lot at the present juncture to draw your attention to the ominous circumstance that a distinct and powerful reaction, which it would be affectation to pretend to ignore, has fairly set in, north, south, east and west, with respect to Darwinian evolution, principally brought about by the damaging admissions of its own advocates, especially of its own author, which cannot fail to result in the ultimate relegation of the hitherto idolised hypothesis to the shady region of exploded speculations. For everyone who chose to look a little below the surface, such an issue was inevitable; for how could a theory which, as we shall see, is both irrational and unscientific survive? Doubtless such a statement as this will sound incredible in your ears after the eulogistic effusions to which you have been so long accustomed issuing incessantly from the press, leading people to believe that nothing else was reasonable or scientific, and writing everyone down an ass who did not bow the knee to the Darwinian idol. But there has been a little too much of that soaring aloft on phantom wings, and it is high time you were warned of the hollowness of much that apes the airs of science. Not even Darwin's greatest partisans can object to our putting the system identified with his name into the crucible of reason, that we may discern how to separate the precious from the vile, and reject the superabundant dross which bulks so largely to the unsuspecting eye. I maintain that Darwinism is going and was bound to go to the wall, because it is not reason; and consequently my first proposition is—

## DARWINISM NOT REASON.

The fate of anything that does not stand to reason is not difficult to decide. He need be no prophet to predict its downfall. It is like the house built upon the sand. Nothing could have been more opportune than the appearance of Darwin's "Life and Letters" upon the scene at the date of their publication. Their timely arrival has given, and will give, an increased and increasing impetus to the reaction that was already initiated, which, gathering force as it goes, will, ere long, prove irresistible. Paradoxical as it may seem, by Darwin's own life and letters the real death-knell of Darwinism has been sounded. The pen of no opponent could have exposed the nakedness of the land with anything like the telling effect of these memoirs. I have no intention, and it would ill become me, to speak slightly of the great naturalist; I believe in rendering to every man his due. No rightly constituted mind can help admiring the skill and self-denial which Darwin displayed in the elaboration of his pet scheme, though the admiration is certainly mingled with regret that he

did not select something more elevating and worthy of his genius ; for he almost literally buried his talents in the earth, and seems to have realised that he had landed himself in a labyrinth of confusion from which he felt he could not extricate himself. It is happily superfluous, therefore, for me to express an opinion of Darwin. He does it himself. Strangely enough, he is his own critic, and is entitled to be heard. He frankly declared, and repeated it with emphasis, that he was in a hopeless muddle ; and if in a hopeless muddle himself, he was certain to muddle other people. In case this may be deemed an exaggeration, I will cite his very words. He says ("Life and Letters," vol. ii., p. 149,) "I am conscious that I am in an utterly hopeless muddle ;" and not content with saying it once, he re-exclaims, "Again, I say, I am, and ever shall remain, in a hopeless muddle." I refer to this purposely, because it partly accounts for the extraordinary irrationalism in argument which meets you at every turn, and his inexplicable taking of things for granted that any ordinary mind would perceive could not be produced without an adequate producing power.

It accordingly comes to this : that, in order to a just perception of Charles Darwin as he really was, we must clearly distinguish between Darwin as an observer and collector of the facts of natural history, and Darwin as an interpreter and applier of those facts. As an accurate observer of certain natural phenomena he was unsurpassed, and as a collector of interesting facts you could not find his equal ; but he was lamentably deficient in grasping their true significance, and extremely inconclusive in the deductions he drew from them. In the former respect he was a scientist ; in the latter, he unwittingly became a sophist. Considerable allowance, I grant, must be made for Darwin here, which cannot in justice, be extended to some of his disciples. We all know how difficult it is for an over indulgent parent to see the faults of his spoiled child, and Darwin's excessive fondness for his darling theory made him blind to its defects, and induced him to look, in spite of himself, at all the facts he was able to gather through the coloured spectacles of his night and day dream. Nor is this mere conjecture on my part, for in connection with a very instructive episode in Darwin's life, he confesses himself he was blind ; and you know what happens if the blind lead the blind. The occasion to which I allude was a very masterly criticism by Fleeming Jenkin, a professor of engineering, in which he tore the Darwinian theory to tatters. Without calling any of Darwin's facts in question, he simply took him upon his own ground, mercilessly exposing his respective positions and demonstrated them to be nothing but a series of logical fallacies. Darwin, stunned by a blow, the force of which he could not evade, was constrained to make an admission that virtually meant the surrender of the citadel. Writing to Wallace (vol. ii., p. 107,) he says, "I was blind and thought that single variations might be preserved much oftener than I now see is possible or probable." This was tantamount to an acknowledgment that species could not be evolved in the way he had imagined, and one would have thought he would there and then have abandoned his theory as untenable ; but it was too dear for its fond parent to part with on the score of anything so uncompromising and particular about cause and effect as reason, at least, as far as a mind so

unphilosophical as Darwin's was concerned. The all-pervading and ubiquitous element of irrationalism and inadequacy of causation so struck the famous astronomer (Sir John Herschel) that he could not resist the temptation of quaintly but aptly styling it the "higgledy-piggledy theory"—a cut which Darwin keenly felt.

But the fact is, the entire fabric of Darwinism is upheld by nothing more substantial than illogical props and fictitious supports, only the instances are so numerous as to be capable of almost endless illustration, and therefore the flight of time demands that I confine myself to the main pillars of the system. Even then the fallacies of argument, the clever manœuvres of comparison and the tricks of language (for there are tricks of language as well as tricks of trade) assume such a variety of form, comprising ambiguities of expression, personification of phrases, incomplete analogies and deceptive high-sounding terms, that I must still further limit myself to a few conspicuous examples, several of which will readily occur to most of you, such as—"Struggle for Existence," "Survival of the Fittest," "Origin of Species," "Natural Selection," and the three allied expressions, "Evolution," "Development," and "Progress."

#### I.—STRUGGLE FOR EXISTENCE.

You all know the important place this holds in Darwin's system as an alleged causative agency in the production of his supposed evolutionary process. Now, wherever you find an attempt to evolve causation out of a collection of conditions, you may rest assured that the real cause is in the *nature* of the thing. But the nature of a thing involves the question, Who constituted it so? And hence the disposition to keep every consideration of this kind out of sight, and give it a wide berth, because it necessarily implies the awkward answer that it was the Creator. But since Darwinism exists for the very purpose of trying to account for everything outside and apart from that Almighty Factor, without Whom all nature, animate and inanimate, is unaccountable, we need not be surprised that it should seek to evade the real truth and search for the explanation in a multitude of trifling extrinsic surroundings that exert little or no direct influence on the subjects they are supposed to act upon; and when they do, it is, as often as otherwise, in a manner quite the reverse of favourable to Darwin's theory. A close and rigid examination of "Struggle for Existence" distinctly shows that it is really not a cause at all, but a result—the necessary and inevitable result of the fact that all living creatures in the present order of things are in respect of constitution subject to *death*. External conditions and adverse or beneficial surroundings may modify this result to a very limited and more or less perceptible extent in the shape of accelerating or retarding the fatal issue; but it must be manifest to everyone who takes the trouble to think, that there could be no struggle for existence if creatures did not die, though, from their multiplication, there would be a struggle for space. Yet this is only a sample of the characteristic feature in Darwinian reasoning throughout, viz., the vicious practice of continually ignoring the essential cause and unduly magnifying and exaggerating a

mere modifying circumstance, so as in the end to be slipped in as a substitute for it without exciting suspicion of fallacy. Were Darwin's notions on this point correct and just, the conditions here in Victoria, for example, are such that they ought to render struggle for existence practically *nil*, yet we know that the struggle is as keen and fierce in our colony as anywhere, as evidenced by the mortality of Melbourne being even greater than that of London—an indisputable proof of where, as I affirm, the true cause lies. But the expression is inexact and ambiguous in any case; for, strictly speaking, it is not a struggle for existence actually, inasmuch as those who struggle must already exist, but in reality a struggle by the existing or the living to resist death. So far, therefore, from its being a cause of evolution, it is itself an effect of mortality; and surely nothing could be more contrary to reason than putting effect for cause. It is a positive inversion of the truth, however artfully concealed under the usual mask of pretentious phraseology, coined to hide ignorance and yet appear learned. Struggle for existence, correctly interpreted, is neither more nor less than Death Resistance; and the propagation and preservation of species under such circumstances is not by Darwinian evolution, but by reproduction pure and simple, without which death would soon make short work of species in utter defiance of all external conditions, good, bad, or indifferent.

## II.—SURVIVAL OF THE FITTEST.

This equivocal phrase of Spencer's, which has been going the round in the service of Darwinism for years, and which was expected to unravel all the mysteries of organic nature, is the merest tautology, and does nothing and explains nothing. It simply means the survival of the fittest to survive; and when you have said this, what do you learn from it which you did not know before? That Inscrutable Something behind the survival of some and the extinction of others according as that Invisible Power sees fit, is as mysterious as ever, and refuses to be explained away by pretty phraseology, however neatly put. It is generally represented by Darwinists as the outcome of certain assumed factors like "variation," "struggle for existence," &c.; but, just as we have been seeing, that the essential cause of struggle for existence is mortality, so the one absolutely necessary factor in "survival" is *vitality*—*inherent vitality*—and every other subsidiary thing you choose to name is at the utmost nothing but a modifying circumstance. The true cause is in the nature of the creature here also, which, of course, must just be as it was constituted by the Creator. Survival, therefore, is due to the intrinsic vital energy within asserting itself in spite of, and superior to, all extrinsic influences and conditions, which do no more than test its strength, but are not in any real sense causal. Then "fittest" implies intelligent choice. Further, who is to be the judge of what constitutes the fittest? It is all very well to say the fittest must survive; but the question is, the fittest according to whose decision? Darwinism requires that the fittest according to Darwin's notions should survive; but, as a matter of fact, the fittest, according to human ideas of fitness, do not survive, for many of those we would naturally consider the fittest are removed, and those we would regard as the unfittest are left. The race is not always to the swift nor the battle to the strong.

There is really no such thing as the haphazard survival of the fittest of Darwinism ; for after all, it resolves itself into this : that the fittest, according to an all-wise Providence, survive, and you can make no more of it. Besides, what we want to know is not the survival of the fittest, for what has the survival of anything, fit or unfit, to do with origin ? We want to know the *arrival* of the fittest, and the Power that could originally bring such on the scene will certainly be equal to their survival.

### III.—ORIGIN OF SPECIES.

You have only to consider what origin is to detect the deceptive ambiguity of this misused word. However humbling and trying the discovery may be to man's pride, it has nevertheless to be acknowledged, and the sooner the better, that the reasoning powers of the most learned, no less than the most untutored, utterly collapse and break down in the presence of all problems relating to the origin of things. By nature we are so constituted that for every object that comes before us we must suppose a cause and a beginning ; and hence the irresistible craving of man's mind in general, and of Darwin's in particular, to know the beginning of species ; but, inasmuch as we are caused *beings* ourselves, we cannot, of our own knowledge, know anything about *causing to be*. Origin is, therefore, clearly outside the sphere of sense and demonstration, or, in other words, beyond the sphere of science ; and unless the Omnipotent Originator is pleased to reveal it, and I am content to be told what I cannot otherwise find out, all certainty about it is impossible, and I must remain ignorant for ever. Consequently, if any man propounds a scheme, be his pretensions what they may, purporting to account for the origin of species by a theory which dispenses with the Originator, I may be perfectly certain he is deceiving me by the sound of something that is not there at all in sense. Origin does not mean origin here in its true acceptation at all. As it stands in the expression "Origin of Species," it neither is what it seems nor seems what it is. Origin by evolution or development has no more meaning than a round square ; and if Darwin only means perpetuation of that already originated, his whole system is a mockery, for such is indubitably by ordinary generation, and there is no other way of preserving species known in nature,—transition being impossible according to existing natural laws. Darwinism is, therefore, founded either on a misconception or a misrepresentation at its very start ; and it is remarkable how misleading even a single equivocal term may become, especially when made the basis of a new school of thought.

Nor does *species* mean species any more than origin means origin ; so the expression is doubly ambiguous. Darwinism is the obliteration of species properly so called, and eliminates from species everything that is specific. It illogically puts accident for essence—that is to say, those very points which may be present or absent in individuals without affecting the essence of the species Darwin makes everything of and insists on the real essence disappearing ; whereas we know it is precisely the opposite. A little reflection must convince you that the accidental features or the particular variations may or may not be transmitted, according to circumstances ; but the transmission of the essence is an absolute necessity, otherwise the



species becomes extinct. And further, the fact that, when once extinct such never can be reproduced, is surely conclusive evidence that species depends on nature and constitution, not on trifling accidental minutiae, no matter how many millions of years you may conceive them to have been accumulating.

Darwinism is based not on the *knowledge* of species, which would be true science, but on *ignorance* of species—the ignorance that mistakes a variety for a species or a species for a variety. Darwin took advantage of this imperfect acquaintance for the purpose of reducing species to a vague something, he could not tell what—a mere arbitrary ideal conception—which may mean one thing to one naturalist and another thing to another, yet retaining the name because convenient for classification, though robbed of its distinctive meaning. But it never seemed to dawn on him how he thereby completely stultified himself. For, fancy any man attempting to give a satisfactory explanation of the origin of something about which he confesses himself so ignorant that he does not know where it begins or ends. I quite recognise the difficulty in the present state of our knowledge of accurately defining species, but no definition, which does not embrace the essence of the individual, could be accepted as a definition at all. In any case, nothing can be more certain than that Darwin's making it to consist of an accumulation of non-specific accidents is all wrong, for such could not possibly constitute a real species under any conceivable circumstances. No doubt naturalists on either side of this question have blundered, both about varieties and species, but the remedy is not in virtually denying, like Darwin, species altogether, and trying to represent all living forms as if no more than mere varieties of one another. Species is the name for a fact in nature, not a convenience for classification, and it is the business of science to find out what are true species and what are varieties; but it is neither reason nor science to seek to blot out nature's landmarks. Where doubt exists, when practicable it should be tested by Reversion; and once science is able to determine the exact limits of the variation of species, the law of species will be found to be as fixed as any other natural law, and specifically immutable like the rest, unless changed by Divine intervention. The theory, therefore, that would make the law of species an exception to every other law in the universe, is, on the face of it, a huge blunder, and the frivolous talk often freely indulged in about the immutability of the laws of nature and the mutability of species is manifestly absurd. The notion, too, that species vary everywhere and in all directions is pure assumption to suit the exigencies of the hypothesis, for variation is by no means unlimited or indefinite, but is distinctly limited to degree—so much so that you have only to employ a word with a definite meaning instead of species in order to see the whole fabric of Darwinism crumble before your eyes. Take the word "kind" and fix on any kind of creature you choose. It is the same kind all through till it becomes extinct. The one individual varies from the other, but the *kind* of creature does not vary. You may also have varieties of this particular kind of living form, but they are varieties of one and the same kind. No matter what the varieties of pigeon may be, the pigeon is always a pigeon; and were this to continue for as long ages as your fancy can picture, while the present laws of nature operate, the

kind would always be the kind, and the variation, however variable, would never go beyond one of degree. A variation in *degree* goes the length of a variety, but a variation in *kind* means a transition which you could not have without a miracle. Consequently species did not mean species in Darwin's mouth, but a mere aggregate of non-specific variations which never could amount to a real species, and thus it is people are imposed upon by the adroit manipulation of these verbal ambiguities.

#### IV.—NATURAL SELECTION.

The number of fallacies grouped around this magic phrase, to which Darwin attached such supreme importance, is perfectly astounding. There can be little doubt that he regarded it as a substitute for God, for he called it "My Deity, Natural Selection," and nothing shows the weak side of the otherwise great man more than the marvels he got himself to believe a mere phrase could effect. In itself "Natural Selection" is nothing but a name, yet he fancied it a cause, and by personification clothed it in his imagination with power sufficient to have brought into existence all the different kinds of living forms that are now or ever have been on the face of the globe. Darwin's notion of selection was a selection which itself selects. Common sense might teach an ordinary mortal that there is no such selection, nor can be. Whatever the selection, it is obvious you cannot have it without a Selector, nor apart from the existence of the thing to be selected. Take, for example, the selection of a wife, and that is a very natural selection. The lady must exist who is to be selected, and it could not take place without the selecting gentleman, while the selection itself is simply a name for the act or mode of making the choice.

It has always been a mystery to me how Darwin, when he came to illustrate Natural Selection by artificial selection, could miss detecting this palpable blunder. The keystone of the Darwinian arch consists in the argument that, if a bird-fancier by artificial selection can produce all the varieties of pigeon so well known to us, such as fantails, pouters, tumblers and all the rest of them, Natural Selection will in a similar manner, if you only give it time, account for all the different forms in the world, not even excepting man. The whole of Darwin's system stands or falls with the validity of this position. But it will not bear a moment's sober examination, for when Darwin came to institute the comparison between the two, he had to leave out the principal part—the efficient cause—because it would spoil his little game to carry out the analogy fully. He forgot, or pretended to forget, that there was a selector in the one case and that there must be a selector in the other. Who answers to the bird-fancier in Darwin's Natural Selection? Nobody. He slyly omits any such personage, yet this is the very point essential to his argument. He tries to make up for the lack of this by personifying the phrase and making a deity of it; but it will not do. Could there have been any selection of the pigeons without the bird-fancier? Certainly not. Artificial selection must have an intelligent mind behind it. The selection itself is not a cause. It requires the presidency and direction of human intellect to constitute the cause, and, therefore, you must have in Natural

Selection a corresponding Presidency, only infinitely grander. The selecting selection of Darwin is a contradiction in terms, and his resorting to this manifest fallacy of incomplete analogy is totally inexcusable. His own sympathisers could not help seeing that there must be a producing cause equivalent to the result, otherwise it could not hold, though some of the agnostic type chose to ignore it from their desire to dispense with such a Power, and clutched at any scheme that put God and His claims as far off as possible. But such conscientious friends as Lyell and Asa Gray pointed out the fatal defect and suggested how it might be rectified. Darwin, however, would not have it. When Lyell pressed the necessity for predicating a primeval creative Power, Darwin wrote, "If I were convinced that I required such additions to the theory of Natural Selection, I would reject it as rubbish" (vol. ii, p. 210;) and writing to Asa Gray, he said, "Designed Variation makes, it seems to me, my deity Natural Selection superfluous" (vol. ii, p. 373.) These men were fully alive to the fact that Darwin's hypothesis was not reason without the guidance and direction of the Selector, and could only adopt the theory with that important mental reservation; but, then, such was not Darwinism, for Darwin regarded that as destructive of his entire system. They perceived what Darwin did not, for he admits he had little or no metaphysical faculty. He says, "I find that my mind is so fixed by the inductive method that I cannot appreciate deductive reasoning;" and again, "My power to follow long and purely abstract train of thought is limited." But then, on the other hand, he saw what his good friends overlooked; for Darwin's love for his theory was like a mother's love for her child. The reason for a thing does not trouble her, yet she would go through fire and water to protect her infant. So with Darwin. However insusceptible to the force of abstract reasoning, he was sensitive to a degree—instinctively sensitive to anything that endangered the safety of his beloved hypothesis. He consequently detected in an instant that it would have no *locus standi* whatever, once you admit the necessity for an originating and directing Agency. Hence his resistance of the idea of design and superintendence, though his own illustrations demanded it to make them consistent with themselves, and it also accounts for the persistence with which he adhered to his fortuitous, haphazard medley of "complex contingencies." The truth, nevertheless, comes out on both sides, and Darwinism is found wanting when weighed in either balance. That is, without an Infinite Mind behind it, on the one hand, Natural Selection is utterly valueless and completely breaks down, as Lyell and Asa Gray clearly perceived; and with such a Supreme Mind on the other, there is, as Darwin no less clearly saw, no occasion for the theory of Natural Selection at all—to use his own word, it is "rubbish," because it makes it Supernatural Selection, and it was just as easy for that Omnipotent Intelligence to originate everything as anything, possessing as it does the power to originate when it pleases, how it pleases, and as much or as little as it pleases. It is further open to that same Power to employ whatever subordinate agencies or secondary causes seem to it fit for the execution of its designs, all being subject to the control of the Absolute, which the Creator could not be if bound by anything; for absolute means that He is not tied to conditions. Thus, like all the devices that ever have been or will be invented to dispense

with the Indispensable, Darwinism in its turn proves a miserable failure.

But it is a greater mystery still that Darwin did not observe the impracticability of the scheme when he came to the working out of the law of Reversion to type. There, on his own showing, his Natural Selection refuses to run on the rails he has laid down for it, and proceeds at once to undo all that artificial selection had succeeded in effecting. The whole of the varieties of pigeon, whether black, white, striped or spotted, most provokingly go back to the dark slaty hue of the common rock pigeon whenever the mechanical interference of the bird-fancier is removed, and you have the strange spectacle of his darling theory being hopelessly overthrown by his own investigations. So far, therefore, from Natural Selection being analogous, in respect of *modus operandi*, to artificial selection, as the theory demands, Darwin himself, by the principle of Reversion, demonstrated that they are diametrically opposed in their operation, and thus effectually disposed of his own hypothesis, at least as far as it depended on that argument.

#### V.—EVOLUTION.

I ask you to note how fraught with deception has been the artful play on this one word in the Darwinian interest. The elasticity of the term, with its many significations, has been made to answer Darwin's purpose admirably ; so that, unless you are carefully on your guard, you will be unconsciously transported across some impassable gulf before you are aware of it by the legerdmain of a different meaning of the same word. Let there be no misunderstanding : we believe in evolution in any natural acceptation of it as ordinarily used, whether as in act or a process. We believe, for example, in the evolution of an idea from the mind, but that is too instantaneous for Darwin's theory, which must have countless ages for its imaginary and fabulous process, though why it is difficult to see, except that it would be too like a creation, for you observe an evolution can be an evolution without the protracted and indefinite prolongation he demands. We also believe in a military evolution—that is, a smartly executed movement ; but that, in turn, is far too sudden for Darwin's scheme. We further believe in the evolution of the embryo to the full grown individual—a process which is both limited and definite ; for, even as to man, it only takes a few years, and each kind of embryo goes through its own special cycle of developmental changes whatever their variety, but never by any chance evolves a different kind, and all this is natural. We believe in evolution, moreover, in the sense of the progressive advancement of the race, for it is progress in the same kind, and this also is natural. We believe in evolution according to its simple meaning, viz., a rolling out ; but when you come to Darwinian evolution, that means not only a rolling out but a rolling into something else—in other words a transformation ; such, we aver, is not natural, however skilfully it may be made to appear so. We believe in development in its natural sense, because when we speak of it we mean the development *of* something ; but when you come to Darwinian development, that is not the development *of* anything, as one would be naturally led to infer, but the development *out of* one thing into another thing ; again we say this is not natural, being really a transmutation only disguised by the strategic use of the word “develop.” We believe

in progress, for in ordinary language we mean progress in the same sort ; but, when you come to Darwinian progress, that is progress out of its own sort into another sort, which, we repeat, is not natural. Consequently there is not one of these expressions but is falsified out of its natural sense by Darwinists, and only thus could the hypothesis have been rendered plausible. Now mark we do not object to ordinary natural evolution in general in any sense of the term in common use ; but we do object to the extraordinary preternatural evolution of Darwin in particular, which is one kind passing into another and higher kind, and necessitates the exercise of some power above natural law to effect it, and it is the fallacious reasoning from ordinary kinds of evolution, which nobody disputes, to the extraordinary evolution required by Darwinism as if it were the same in kind, which is so mischievous and reprehensible. What is sedulously kept out of sight by all these men is the indisputable fact that the only kind of evolution, which is of the slightest value for Darwin's theory, involves a *bona fide* change of species—a veritable *transitio in aliud genus*—which could not take place, according to present natural laws, without a miraculous interposition of Divine power, and if you only pin them down to this, its true special Darwinian meaning, all the arguments that have ever been or will be advanced in favour of such evolution by its ablest advocates, let them charm ever so wisely, must, if logically analysed, utterly break down at this point.

I have already said enough to amply substantiate my contention that Darwinism is not reason, but I must refer to one other point. Darwin could not or would not see that his system afforded no satisfactory explanation of the existence of such a noble and complex being as man ; for when his co-inventor, Wallace, confessed that their joint theory miserably failed to bridge the chasm between man and the highest of the lower creatures, he wrote him : “ As you expected, I differ grievously from you, and I am very sorry for it. I can see no necessity for calling in an additional and proximate cause in regard to man ” (vol. iii., p. 116 ) Referring to Wallace's article, he further wrote to Lyell : “ But I was dreadfully disappointed about man. It seems to me incredibly strange ” (vol. iii., p. 117.) But Darwin made the greatest exhibition of himself when he got to the ape, and had to face the question as to whose child the primeval baby could have been. The absurdity of his hypothesis was never more manifest than when he was obliged to monstrously represent the original human infant as the child of non-human parents. How could a human child be conceived without human parents ? How could such a child have been born without a human mother and a nurse ? How could it have been nourished without human care and attention ? How could it have been reared except in the midst of human surroundings ? How could it have been preserved from wild animals and the innumerable dangers to which it must have been exposed without human protection ? What language could it have spoken, or what life could it have lived, without a human father and a human mother ? How could one child have multiplied, or how could there have been a human race without a mature male and female human pair ? You only need to state the case to show its shocking irrationalism, and I appeal to every man or woman of common sense in this audience if such preposterous vagaries can for a

moment be compared to the sublime idea of creation which no one ever arrived at without the aid of Revelation. We can therefore come to no other conclusion as to Darwinism, from what we have seen, than that its beginning is unreason, its middle unreason, and its end unreason.

I further contend that Darwinism is going, and was bound to go, to the wall, because it cannot stand the test of science, and accordingly proceed to my second proposition.

## DARWINISM NOT SCIENCE.

Do not be surprised ; I mean what I say. It is not science, and never will be. This is no random statement, nor am I afraid to make it in the face of prevailing opinions to the contrary. I yield to no man in admiration for the splendid advances and magnificent discoveries of true science, but it would be extremely unwise to allow these, however brilliant, to blind us to the humbling fact that even were she to reach the utmost bounds of her possibilities (and she is very far from that yet) the burning questions which it most concerns mankind to know would remain unsolved, and science, with all her numberless investigations, would be as helpless as nescience to unravel the mystery. Her domain is the *constituted*, and whatever the extent of her researches within that sphere she neither knows nor pretends to know who or what *constitutes* ; and yet, without such knowledge, she cannot tell us the full truth respecting one single thing. You will never get science to trace anything up to where it came from. Now, if this be the case with real science, what are we to expect from Darwinism, which is not science at all, but a theory of the scientist ; and you must not permit yourselves to be carried away by the idea that everything written or spoken by a scientist is science. I am aware there are some Darwinian aspirants who deceive themselves and others by drawing spurious comparisons between Newton and gravitation and Darwin and evolution, as if they were parallel. You may safely set down anyone who has the temerity to speak of proof of evolution in the Darwinian sense as not worth listening to, for no scientist worthy of the name would think of risking his reputation by the utterance of anything so unscientific. Newton discovered a fact. Darwin discovered nothing ; he only launched a theory. Gravitation is undeniably proved ; evolution is not only undemonstrated but undemonstrable. In science it is not speculation that decides, but positive verity. Science is the knowledge of truth in the sphere of Nature—the record of what *is*, not what *may be*. Nothing, therefore, is, strictly speaking, science, unless demonstrated to the senses or proved by direct experiment.

But, you may ask, is not Darwinian Evolution established beyond a doubt? I reply, by no means. It is fiction ; not fact. Let Darwin, however, answer in his own words, they will be much more convincing than any words of mine. He says (vol. iii., p. 25,) “ When we descend to details we cannot prove that a single species has changed, nor can we prove that the supposed changes have been beneficial, which is the groundwork of the theory ; nor can we explain why some species have changed and others have not.” This is no harsh criticism by an adversary, but the inventor's

own voluntary declaration. The confession is humiliating and disappointing, no doubt, after such an amount of trumpet-blowing; but there it is, and nobody can get over it. Not only has Darwinism not been proved, but its own author says it "cannot." Theory it is, and theory it must remain. Truth it never can be shown scientifically to be, therefore its dying a natural death is only a question of time. Just try and realise what sort of a theory it is in the light of Darwin's own commentary. It pretends to account for the origin of species by change of species, yet coolly tells you it cannot prove that a single species has ever changed; then it premises as the very groundwork of its existence that these imaginary changes are always beneficial, which it as coolly tells you cannot be proved; and it further assumes as an essential element that some species have changed while others have not, yet unblushingly admits it cannot tell why. In other words, supposition built upon supposition, without a vestige of proof, is Darwin's own version of his own theory.

But, again, you may tell me, "This does seem unaccountably strange. Have we not been hearing the opposite in dailies, weeklies, monthlies, and quarterlies for years? Have the dailies and weeklies not positively represented Darwinism as proved a hundred times over, while Darwin himself contradicts it? And the monthlies and quarterlies, if more guarded in their phraseology, have they not generally left, with few exceptions, the impression on the reader's mind that there was no question about its substantiation?"

All this I grant you, but it only shows how easily people can be imposed upon, and ought to be a warning not to trust to second-hand retailers of Darwin and Huxley, or uninitiated reviewers who can barely read a scientific work intelligently, for your scientific information. You have heard Darwin's frank avowal; now listen to Huxley, his greatest living disciple, while, in the chapter written by him in Darwin's "Life," he gives a definition of Darwinism. He says: "The suggestion that new species may result from the selective action of external conditions upon the variations from their specific type which individuals present, is the central idea of the origin of species, and contains the quintessence of Darwinism." I do not discuss the merits of this definition here, as I will have to refer to it again, but I ask you specially to note that on the high authority of Professor Huxley, the quintessence of Darwinism is what? A scientific fact? Not at all; a suggestion. Would you believe it, after all the fuss; only a suggestion? You will not catch Huxley napping, as far as committing himself to any definite statement is concerned; and I need scarcely tell you that a suggestion is not science. It was further on this very ground of its being so unscientific that the zoological section of the French Academy refused to receive Darwin into their society. An eminent member of that learned body, when writing to explain the failure of Darwin's election—and all this comes out, remember, in Darwin's "Life"—said: "What closed the doors of the Academy to Mr. Darwin is that the science of those of his books which made his chief title to fame—the 'Origin of Species,' and, still more, the 'Descent of Man'—is not science, but a mass of assertions and absolutely gratuitous hypotheses often evidently fallacious. This kind of publication and these theories are a bad example, which a body that respects itself cannot encourage" ("Life,"

vol. iii., p. 224.) Moreover, it is not a little remarkable that it was the great French scientist, Pasteur, who demonstrated, by direct experiment, that Darwinism is not science. He really disproved the theory, though this is generally kept in the background. Pasteur's discoveries not only proved that all life comes from pre-existing life, and thereby exploded the figment of spontaneous generation, but they also proved that all living forms, from the lowest microbia upwards, are descendants from similar ancestors. Now, as you know, the very foundation-stone of Darwin's theory is descent from *dis*-similar ancestors. Science has shown the opposite; and since Pasteur's experiments, the celebrated German scientist, Professor Virchow, of Berlin, declares: "Every scientific conclusion maintains that one generation is legitimately descended from another precisely similar." So long, therefore, as the present law of descent exists, Darwinian evolution is impossible. Professor Virchow is further very emphatic, and affirms: "We cannot teach, we cannot pronounce it to be a conquest of science that man descends from the ape or from any other animal." So much for the non-science of the theory, but let us also test the value of the much vaunted innumerable collection of

#### DARWINIAN FACTS.

You may say, and very properly, "All this is very puzzling. What has become of the huge array of facts so persistently alleged in favour of Darwinism, if nothing has been proved?" You may well ask, Where? The facts continually paraded before people's eyes are all about other things, and are where they always were, right and true in their place in nature, but when dislocated from their natural surroundings and cleverly disposed in a particular setting, so as to make the facts square with Darwin's theory, instead of his theory with the facts, they can be worked up into a kind of pseudo-scientific romance, marvellously entertaining, especially when ornamented and embellished by the creation of a perfect wonderland of imaginary events. As Professor Fleeming Jenkin said: "It is a theory that can invent for its convenience trains of ancestors, of whose existence there is not a tittle of evidence; it can call up continents, floods and peculiar atmospheres, drag up oceans, split islands and parcel out eternity at will." But, apart from these purely fictitious flights of fancy, it can weave the very facts which it collects into a Darwinian novel. Darwin himself collected a multitude of interesting facts from the vegetable and animal kingdoms—facts about curious plant, insects, pigeons, domestic animals, apes and savages—but he unfortunately failed to collect one fact about evolution itself; so that it mattered little how many facts he might gather about other things, if the one fact needful was wanting.

Indeed, so eager was he to find facts to bolster up his theory that he saw them where they did not exist. A notable example of this is furnished by his thinking he saw the missing link between man and beast in the Fuegians, whom he selected as the strongest evidence of his hypothesis, and for this end actually placed them almost below the level of certain of the lower animals. Darwin wrote: "Viewing such men, one can hardly believe that they are fellow creatures and inhabitants of



the same world. Their language, according to our notions, scarcely deserves to be called articulate. Captain Cook has compared it to a man clearing his throat ; but certainly no European ever cleared his throat with so many hoarse, guttural and clicking sounds." Lest there should be any suspicion of unfair dealing on my part, permit me to quote the strictures of Professor Max Muller on this very suggestive incident. He says : "When Darwin looked at the Fuegians, he no doubt saw what he tells us ; but then he saw it with Darwinian eyes. Even with regard to their physical aspect, Darwin must either have been very unlucky in the Fuegians he met, or he cannot have kept himself quite free from prejudice. Captain Parker Snow speaks of them as, without the least exaggeration, really beautiful representatives of the human race ; and Professor Virchow, when exhibiting a number of Fuegians at Berlin, strongly protested against the supposition of their being, in Nature, an inferior race, so that they might be considered as a connecting link between ape and man. But what shall we say of Darwin's estimate of the Fuegian language ? Here we can judge for ourselves ; and I doubt whether, as far as its sound goes, anyone would consider Fuegian as inferior to English. If we consider how small is the number of words in the vocabulary of an English peasant, and if we find that one dialect of the Fuegians—the *Tagan*—consists of about 30,000 words, we certainly hesitate before venturing to classify the possessors of so vast an inherited wealth as the descendants of poor savages more savage than themselves. Such facts cannot be argued away." A testimony like this from Professor Max Muller cannot be gainsaid, and we now know for certain he was right ; for since Darwin's "Life and Letters" have seen the light, we learn that Darwin subsequently found out, through the success of the South American Missionary Society, how grossly mistaken had been his estimate of the intellectual capacity of the Fuegians, and, in order to make amends for his caricature, sent a cheque for £5 as a token of his interest in their work. Accordingly, however lenient one is inclined to be with a man so passionately enamoured of his own invention as Darwin, this nevertheless touches a weak spot, even where Darwin was strongest. All admit that he was a most diligent and careful observer of facts ; yet here, in the very part where he excelled, and was most to be depended on, his theory so influenced, not to say biassed, his judgment, that he imagines something to be a fact which is not one.

But it was when Darwin came to apply what all accept as undoubted facts that he most signally failed, and yet his clever manipulation took immensely ; for there is nothing in the world so mendacious as facts, if misplaced and misconstrued. These may be conveniently summed up as running in three distinct lines, and might with advantage be classified under the three heads of individual variation, structural resemblance, and germinal identity, or what I call the three great tricks of Darwinism—viz., the variation trick, the resemblance trick, and the identity trick. Indeed, they constitute three of the main pillars in the Darwinian edifice ; and there can be no doubt that the phenomenal success which attended the propagation of the scheme was largely due to the plausibility of these and similar linguistic frauds. They would afford material of themselves for a pecture, without anything else, and, therefore, I must not enlarge ; though,

with your permission, I will endeavour briefly to show how facts that have no necessary connection with Darwinism whatever—ordinary, commonplace incidents—can, by misapplication and distortion, be made to speak a language other than their own.

#### I.—THE INDIVIDUAL VARIATION FACTS.

Darwin, for instance, observed the general fact, known ever since facts were observed on the earth, that no two specimens of any one kind of living form are exactly alike. But by fixing his attention on the item Variation, to the exclusion of more vital considerations, he allowed this to assume such immense proportions in his mind, that he conceived the extraordinary idea that minute deviations from the normal, by accumulating and descending through long ages, might in time amount to another kind of living form, till he actually got himself to believe that a monkey might vary into a man. That any reasonable being, let alone an eminent scientist like Darwin, could be so carried away by the vividness of his own imagination as to suppose that a causeless, mindless, will-less thing like variation, without direction or design, going blindly on and on, could ever perform the series of miracles involved in the successive transmutation of all the living forms ever found on the earth out of one another; and last, but not least, so stupendous a miracle as the conversion of an ape into a man, is an enigma without a parallel. Surely what is involved in the adaptation of the Simian organism to the performance of human functions, and its endowment with the high intellectual faculties of the human mind, brought about by haphazard fortuity, without any efficient cause, is infinitely more incredible than the creation of man out of the dust of the ground by the Almighty Creator. Anything so wild Darwin never could have entertained without shutting his eyes to the still more important and conspicuous fact that, side by side with the slight variations discernible between two individuals, there is a strongly marked, ineffaceable likeness, which no accumulation of variations could ever blot out or destroy. Moreover, this indelible likeness is bound up with the nature and essence of the individual; whereas any special variation is merely a separable accident, which he may either have or not have, and yet remain what he is all the same. You all know the familiar fact that there are no two blades of grass alike; but the existence of this variation never interferes with the other unalterable fact that grass is grass all the world over—so much so that, no matter how the individual blades may vary among themselves, and were things to go on as they are now for any number of years you choose to think of, grass would still be grass, and never would become anything else; and yet Darwin tried to squeeze evolution out of a simple fact like that, which, the moment you test it, tells the other way.

You will remember that Huxley's quintessence of Darwinism is merely a repetition of this same Darwinian Variation trick, viz., "that new species may result from the selective action of external conditions upon the variations from their specific type which individuals present." Observe how careful Huxley is; he does not say that anything has resulted, but the mild suggestion, "that new species *may* result." But from what?

An impossibility—the impossibility of accidents ever becoming essence, or that departures or variations from the specific could ever become species. Here you have it positively stated, in terms that are happily self-contradictory, but which, at the same time, prove that species does not mean species in the mouths of these men, but an aggregate of non-specific variations. You have only to apply this wonder-working suggestion of Huxley's, to which every living creature is supposed to owe its origin, to any well-marked species, such as man, in order to be satisfied of its folly. There are variations innumerable among human beings, seeing men vary so that no two individuals are alike, and they have been subject to all kinds of external conditions; yet they are all so much alike that you could not mistake them for any other kind of creature, nor has any one individual changed into anything higher than a man. Moreover, were the present course of nature to go on for countless ages as it does now, would "the selective action of external conditions upon the variations of human individuals," as we see them, ever result in a "new species" of man? We know that, as now, like would continue to produce like; and no matter how one individual might vary from another, yet the essential likeness would be a constant quantity, whereas the variation, whether benign or malign, would be variable and accidental, but never changing the man as such. The same holds good with every other real species, and it is simply man's ignorance of the exact extent to which a particular species can legitimately vary that would make it seem otherwise in any case. But Darwin managed to magnify the variations by artificial means, so that they appeared greater than natural; and then, by presenting the forced results obtained by human interference, and carefully leaving out all counteracting agencies, he succeeded in making out so plausible a case for his hypothesis that, as you are aware, many of all ranks were captivated by it, and ensnared in the trap. It, nevertheless, transpired that neither the Natural Selection nor the Variation would dance to Darwin's piping. The former actually ran backwards when he tried to improve upon it; and the latter would only go a certain length, but not a step farther.

The importance of the real facts here, especially in view of the unfair way Darwinists have argued from the effects producible by breeding, cannot be over-estimated. I concede all that breeding can accomplish; the question is, What does that all amount to? I accept their appeal from artificial to natural selection; but I defy anyone to make a complete and faithful comparison between the two without overturning Darwin's theory. Curiously enough, they all seem to make it their study to shirk the full application, without which the whole reasoning is false. It is to be regretted that Professor Schurman, of America, has gone the length of denying the breeder to be a cause, for he thereby lays himself open to exposure, particularly as it is obviously due to his not sufficiently distinguishing between the cause of variation as such, and the cause of a variety termed a breed. He is, of course, quite right from the point of view of abstract variation, for, unless creatures were so constituted as to vary, all the breeders in the world could not make them; but such variation being there, the breeder is undoubtedly the cause of the special breed, and nothing is gained by its denial. Darwin, as usual, founded

his whole case on the somewhat ambiguous language of breeders being said to "make a breed of shorthorns," pretending that he could not avoid the ambiguity of such a word as "make." Anyhow, he always managed to pick out terms which appeared to convey more than the reality, and imposingly impress at first sight. I do not question for a moment, however, either the existence of the variation, or the real extent to which the breeder is able to utilise it, or the fact that he is a cause of the breed; the point is the exact significance of each respectively, which Darwin certainly did not perceive. The breeder is not the cause of the variation in the sense of tendency to vary, the true cause of which is in the nature of the animal, *i.e.*, it is so constituted as to vary up to a certain point; but he does take advantage of this natural capacity to vary for the purpose of producing, not the animal, much less an animal of another kind, but a particular *variety* of the same kind of animal designated a breed, and hence he truly is the cause of the breed, for it could not take place without him. Darwin, nevertheless, made three fatal blunders over this simple matter. (1) He failed to carry out the analogy, having no one in his scheme to answer to the breeder; (2) he forgot that if the breeder was the cause, then artificial selection was not a cause at all, but merely a name for what the breeder does, and consequently if artificial selection was not a cause, neither was natural selection without a corresponding personal will and intelligent mind; and (3) he assumed that the production of a breed was analogous to an evolution, which it is not. So far, therefore, from artificial selection affording the slightest countenance to the conclusions of Darwinism, it only needs to be fairly and honestly carried out and applied in order to upset the system. For what are the facts revealed by artificial selection? (1) That abstract variation is in the *nature* of the creature, being so formed as to vary sufficiently to enable it to adapt itself to the conditions of existence in any part of the world in which its lot is cast; (2) that the extent of the variation is distinctly limited to degree; (3) that the breeder's power of utilising the variation in any direction is as distinctly restricted to a *variety*; and (4) that a transmutation is entirely beyond his ability to produce, and could not take place in the ordinary course of nature, though he were to breed for millions of millions of years as long as the present laws of reproduction are in force, except by a miracle.

But besides all this we have the demonstration before our eyes in this island-continent of what actually happens when everything is left to nature, as exhibited in the history of the animals peculiar to Australia. The mudfish, *Ceratodus*, now living in the rivers of Queensland, is supposed, according to the calculations of geologists, when compared with the fossil specimens of the same creature found in the mesozoic formations of other parts of the world, to have come into existence millions of years ago, and if Darwinism were true, it should long ere this have developed into something higher; but here it is, with all the conditions fulfilled and with the requisite eras of immense tracts of time demanded by the hypothesis positively lived through, and yet no sign of an evolution or a fraction of one on their lines is observable. Then, take the marsupials; has any higher kind of creature been evolved out of them? You have these *varying* so as to adapt themselves to different conditions of life in

their respective localities—some becoming insectivorous, some herbivorous and some carnivorous—and you have also the production of *varieties* of marsupial; but though they, like the mudfish, have existed for long ages, judging from the extinct forms discovered in the geological deposits of Europe, yet they have never developed into anything *higher* than a marsupial. There is no getting over stubborn facts like these. The Australian animals live to-day a standing witness against the theory of Darwinian evolution. The truth is there would have been no other kind of animals here to this hour had they not been introduced from elsewhere; and you might as well talk of the rabbits, sheep and cattle now in this country having been evolved out of the living Australian kangaroos, as that the higher animals of other portions of the earth were developed from the extinct marsupials found in the fossiliferous *beds* of European or American geological strata. But not only the living but the dead animals tell the same tale. After all the boasting there has been about the working out of the equine type what does it really amount to? The simple fact is that the fossil remains of certain varieties of horse have been found in certain geological formations, no more no less. That there has been any evolution is mere theorising. Nay, further, it is proof that there is no such thing; for what sense is there in the evolution of a horse from a horse? Is that all they really mean by evolution. If so, it is mere idle trifling and deceiving people by the sound, when the reality is absent. Here they have the necessary geological epochs of long duration required by the theory, and yet on their own showing there is no evidence of the horse having been evolved out of any other creature nor of developing into any higher kind of animal than a horse, and thus they have demonstrated themselves that the utmost which can be produced is varieties of horse just as we have varieties of pigeon and marsupial and nothing more. In other words it accounts for varieties of the same kind, which nobody denies (but not for different kinds) and proves that you could not have one kind passing into another kind, no matter what length of time you allow, according to nature's laws, without a special putting forth of supernatural power.

Nor was this all. The theory was useless except on the supposition that none but favourable variations were hereditarily transmitted from one generation to another. Darwin was able to show, of course, *some* instances of the transmission of favourable variations, and unfairly tried from this to make it appear as if they were *all* favourable, thus ignoring the whole of the facts on the other side. It is well known, for example, that a clever father may have a very stupid son, and it is certain that diseases of brain, blood, bone, and many other unfavourable peculiarities, even sin itself, descend by heredity from parent to child. Accordingly, whether it is the extent of the variations, the action of natural selection on the variations, or the transmission of none but beneficial variations, they exist nowhere except in the inventor's own imagination. But we find, after all, that Darwin himself had his misgivings. He wrote Huxley, "If, as I must think, external conditions produce little direct effect, what the d—— determines each peculiar variation?" He afterwards wrote to Hooker, "It is so confoundingly doubtful;" and to Asa Gray, "The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick." This was because his theory could not account for its origin,

and therefore made it unreliable throughout. You see murder will out.

## II.—THE STRUCTURAL RESEMBLANCE FACTS.

But there is another class of wrongly used facts proceeding on the opposite tack from variation—those relating to structural resemblance, which constitutes, as I have said, what I call the Darwinian resemblance trick. Darwin observed, for example, what everyone can see, that all the animals of the vertebrate type are built on the same fundamental plan, with an ascending gradation in the complexity of structure, and he sought to make capital out of this in favour of his idea that they had all gradually become evolved out of each other. The childishness of such a notion will be apparent if we take other familiar objects besides animals, where the same thing may be observed, and see how the application of this principle will work.

Take *ships*. There, at once, we notice a similarity of plan and an ascending degree of refinement and intricacy of construction. Ships are all essentially of the same build, and they gradually rise from a small boat to an ocean steamer or a full rigged vessel, getting more and more complex in their structure as they ascend; but would anyone be so foolish as to imagine from this that they all became evolved out of one another, or that any of them could be built without a shipbuilder? The real explanation of their resemblance of plan is that they are all intended to float on water and plough the waves, while the increasing complexity of structure is solely the outcome of the mind and intelligence of the constructor. So it is in nature. Whether you look at the fish of the sea, the birds of the air, or the animals of the land, they are all admirably adapted for their particular element, which they could not be by chance; and being all intended to live on the same earth, they necessarily exhibit a resemblance in their general framework, seeing they had to be constructed according to the same general design and corresponding to the grand purpose of their Great Designer.

All that comparative anatomy has been able to show is, morphologically, a comparative structural resemblance, and, physiologically, a more or less functional correspondence amongst living beings, with an increasing degree of complexity and specialty in their organisation when arranged in an ascending scale, but though they to a greater or less extent resemble each other, just as creatures that have to live in the same world, under similar conditions of existence, are bound to do, that is no proof that the one became evolved out of the other. We recognise both the resemblance and the gradation, but we object to the gratuitous assumption that either the one or the other is evidence of evolution. There has been great jubilation over the discovery that monotremes both lay eggs and suckle their young, and it has been hailed with delight as a fresh argument in favour of Darwinism, but what is the fact? Merely a proof of another step in the gradation which we all accept, and also proof of our own previous ignorance, for these creatures had been doing that all along though we did not know it; but it is no proof of evolution, and we must not mistake proof of gradation for proof of evolution, cumulative or uncumulative. Proof is even wanting that these animals came into

existence in the order of the generally received gradation, since they are found in no other part of the world either alive or extinct, except in Australia and the islands adjacent; but granted that they did, in that case they are low down in the scale and on such a supposition must have existed for a vast number of years. Yet here they are to this day following the usual reproductive law of like producing like, but there has been no development into anything higher. Then if we take *bridges* the gradation is no less marked, from a plank across a stream to the magnificent arched or suspended bridge, with all those of smaller size and dimensions intermediate between them; but to argue hence that the one bridge was evolved out of the other is too absurd to be entertained. Nor is it otherwise with *railway engines*. No doubt the engine of to-day may be said, in the only sense in which evolution is true, to have been evolved out of Stephenson's original one, but the evolution took place in the mind of the framer, not, according to the Darwinian idea, in the railway engines themselves, successively out of one another. It is not a little remarkable that Darwin had his doubts, in spite of himself, on this aspect of the question also, for when Professor Asa Gray wrote him that his theory utterly failed to account for the inimitable structure of the human eye, he replied: "The eye to this day gives me a cold shudder; but when I think of the fine gradation, my reason tells me I must conquer the cold shudder." This is very important, for, observe, all he has to lean upon is the broken reed of this "fine gradation," which may be seen any day not only in ships, bridges, and engines, but in *houses*, from a hut up to a mansion or a palace; yet it would be out of the question to suppose that they were all developed out of one another, or that palace or hut could be erected without a builder. You may notice the same "fine gradation" in *crochery* and cooking utensils, not to mention other illustrations, but they all manifest the obvious stupidity of the Darwinian evolutionary conception, so that it was not his reason, but the unreason of his warped judgment, which told him to conquer the cold shiver. Reason, I am satisfied, had it only been allowed full play, would have shivered the notion out of him.

### III.—THE GERMINAL IDENTITY FACTS.

We now come to the most insidious form of fact-representation, or, to speak more correctly, of fact-misrepresentation; which, by the skilful handling of Darwin and his followers, has contributed more than anything else to gain converts to his cause among all ranks and grades. I refer to the alleged facts manufactured out of the seeming sameness of all germinal protoplasm, and which I call the Darwinian identity trick. Nobody can dilate more charmingly on this point than Huxley. The subject is naively introduced in the usual fascinating manner. With a most scientific air, say, the ovule of the worm, the eagle, the lion, and the man are supposed to be placed side by side before the greatest biologist in the world, and the astounding fact is said to be revealed that he cannot tell the one from the other. Moreover, each of these semi-fluid globules of bioplasmic substance may be put on a glass slide and laid upon the field of the microscope, and you are further impressively assured that the most skilled observer using an instrument

of the highest magnifying power can discover not a shade of difference between them. Nay more, they may even be subjected to the strictest chemical analysis, according to the most approved methods and latest appliances of the chemist's laboratory, and you are seriously told, after that ordeal, that no element of distinction can yet be found (as if any chemist could analyse *living* protoplasm.) But, more marvellous than all, you may even compare vegetable spores with animal ova, and you are gravely informed no expert can say which is which. Then, from this apparent sameness of all living germs to man's eye, even when aided by the highest microscopic powers, the ingenious insinuation is at length hazarded, that from such a primordial protoplasmic speck as one of the spores of the lower seaweed, every kind of organic form, vegetable or animal, may have developed one out of the other till man is reached. This sounds very fine; but what if the supposed identity of all embryonic protoplasm is a myth—only apparent, not real? The airy castle in that case falls to pieces. Things are not always what they seem. It is a fact that all living germs *seem* the same, but it is not a fact that they *are* the same. There are just as many different kinds of protoplasm as there are different kinds of plants and animals. Seeming identity does not make them identical.

Listen to Professor Rutherford, a far abler physiologist than Huxley—and there is nothing like setting an evolutionist to answer an evolutionist if you want to get at the truth. He says: "No microscope has yet been constructed, nor will it ever be, with a useful magnifying power that reaches 4000 diameters, and there is little to be gained by using lenses that magnify more than 1500 diameters, for above this power the delusive effects of diffraction become very serious. We must, therefore, rest satisfied with the thought that we can only see masses of matter immensely larger than the molecules of which they are composed. The finest structure of molecular mechanisms must remain invisible. One must, therefore, guard against the supposition that identical physiological properties must belong to things that have an apparently similar structure when seen with an instrument so limited in power as the microscope, *e.g.*, it reveals no noteworthy difference between the germ of a rabbit and that of a dog; and yet, from observing the results of their activity, we are obliged to conclude that there must be some essential difference between them." Thus my physiological teacher, Professor Rutherford, warned me against the mistake of my biological teacher, Professor Huxley. It comes, accordingly, to this—that the supposed identity of all living things at their start, of which so much is made in our day, is no identity at all, but failure to detect delicate and essential distinctions when actually there, and is no proof of Darwinism, but of the comparative ignorance of the observer on the one hand, and the comparative weakness of his microscope on the other. Everything is there in embryo, and he has only to wait a little in order to be undeceived as to any supposed identity. Let each of these ovules develop sufficiently to come within the range of the scientist's capacity and that of his lens, and the differences that were already there become plain and patent. Does this afford the slightest pretext for the Darwinian notion, that one of these germs may develop out of the other, or into any other sort of creature?



The development is in no instance left to chance. The process peculiar to each is fixed. Every one of these specks of protoplasm is distinct—essentially distinct—the one from the other; and it is not a question of *may*, but, if it is to develop at all, it *must* develop into that particular kind from whence it derived, according to the precise constitution stamped on it originally by its Creator. Consequently this mainstay of Darwinism is founded, not on science, but on an optical disability inherent in the scientist and his inadequate appliances, and could only be made plausible by a species of verbal trickery. ¶

Moreover, it is a delusion that all life starts in germs in the sense of origin: it is confounding origin with reproduction. The reproductive process starts in a germ; but there is not one of those germs but presupposes a mature form of its kind. You could not have one of them without a parent. There is not a particle of protoplasm, however minute, capable of developing into anything that is not evidence of the maturity of the form from which it sprang. It is not possible to have a germ except from a full-grown individual of its kind. This indisputable fact—which upsets all their special pleading—has been persistently overlooked and ignored by all Darwinian apologists I have ever heard of; and I venture to affirm, without fear of contradiction, that the notion that life, in the order of organic nature known to us, ever had its start *ab initio* in a germ is not science, but the reverse. All scientific observation and experiment indicate the contrary. Take the ovum of the hen, or what is familiarly known as the hen's egg. Could anyone in this audience conceive of that hen's egg without a full-grown hen? So with the human ovum or that of any other living creature. Whether you trace it forwards or backwards, the ultimate object arrived at either way is not the germ but the mature form. I care not how you view it—whether you regard what the germ develops into, or what it sprang from—you are brought face to face with the full-grown individual. Hence the glowing descriptions indulged in by evolutionists are all moonshine about everything in the organic world coming step by step from a primitive germ. The evidence is all the other way. Exact science leads you in every case to the mature full-grown form, and leaves you there, which accords with what the Word of God says; and true origin can only be learned from the mouth of the originator or not at all—anything else is pure speculation. The moment this ultimate fact of maturity is realised, Darwinian evolution must vanish.

But it has not even the merit of being new, for, though not generally known, and probably Darwin lived and died without being aware of it, nevertheless it is true that something remarkably akin to Darwinism is found as far back as the old Phœnicians, and the account of it given by Sauchoniatho, who is considered the oldest writer in the heathen world. The original we have not, but fragments of the Greek translation, for which we are indebted to the citation of Eusebius (*Præp. Evang.*, i. 107 :) “All the seed of creation and the generation of the universe” are attributed to the “rotting of a watery mixture” from which came “animals without sense,” and out of these again “animals with sense called the spectators of heaven.” What is this but development, the Phœnician development theory? At any rate the Darwinian idea of trying to account for everything by a

process of evolution is there. and yet this childish dream of antiquity is reproduced by Darwin and accepted as the ripest fruit of the advanced science of the nineteenth century.

In the light of what we have seen, I think I am justified in characterising Darwin's system as a reasonless, scienceless, and I may now add,

#### GODLESS THEORY,

which, in the words of Sir W. Dawson, presents us with "an endless pedigree of bestial ancestors, without one gleam of high and holy tradition to enliven the procession; and for the future the prospect that the poor mass of protoplasm which constitutes the sum of our being, and which is the sole gain of an infinite struggle in the past, must soon be resolved again into inferior animals or dead matter. That men of thought and culture should advocate such a philosophy argues either a strange mental hallucination or that the higher spiritual nature has been wholly quenched within them. It is one of the saddest of many sad spectacles that our age presents." This could not be more painfully exemplified than in the case of Darwin himself, who, instead of developing degenerated into an agnostic from a theist, the debasing influence of his theory causing him even to stifle the higher aspirations of his own inner consciousness, as seen in the letter he wrote to Mr. Graham, the year before his death. He there says: "You have expressed my inward conviction that the universe is not the result of chance. But then, with me, the horrid doubt always arises whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value, or are at all trustworthy. Would anyone trust the convictions of a monkey's mind, if there are any convictions in such a mind?" However amiable may have been some of Darwin's qualities in other respects, here we can judge for ourselves, and see all that his agnosticism can do for him. He cannot rise above the low, grovelling, degrading conception of bestiality, even when thinking of man's mind, and thus sinks far far beneath the level of the Grecian heathen poets. They rose to the sublime thought that we are God's offspring, but Darwinism descends to the dismal idea that man is the offspring of a brute; and this, forsooth, is called science and progress! Progress, alas, indeed it is, but progress in the wrong direction. Darwin was a great naturalist, but he never learned Nature's real lesson. It teaches Eternal Power and Godhead, not agnosticism, and everyone is without excuse who refuses to be taught. Darwin declared to the German student that he did not believe there ever was any revelation, but that did not alter the fact. I know we live in a day when it is considered scientific to doubt and unscientific to believe in the Word of the living God. Never was there a greater mistake, nor would it be difficult to expose the utter fallacy of this erroneous impression. Master intellects that have largely contributed to the advancement of science in all her departments have not been backward in acknowledging the importance of Divine Revelation. The great Cuvier did not consider it unscientific to pay homage to the Word of God; nor did Sir Isaac Newton, the prince of natural philosophers, tarnish the lustre of the science of which he was so distinguished an

ornament by denying God or dishonouring His truth. And Faraday, the famous chemist, to whom we are indebted for the laws of electricity, was a devout believer of the Lord Jesus Christ ; while Sir James Y. Simpson—another brilliant name to whom science owes not a little—found that in Revelation, Christ and Christianity which no amount of scientific truth could afford, as appears from the following lines :—

Oft 'mid this world's ceaseless strife  
 When flesh and spirit fail me,  
 I stop and think of another life  
 Where ills can ne'er assail me ;  
 Where my wearied arm shall cease its fight  
 My heart shall cease its sorrow,  
 And this dark night changed for the light,  
 Of an everlasting morrow.

On earth below there's nought but woe,  
 E'en mirth is gilded sadness,  
 But in heaven above there's nought but love  
 With all its raptured gladness  
 There till I come waits me a home,  
 All human dreams excelling,  
 In which at last, when life is past,  
 I'll find a regal dwelling.

Then shall be mine, through grace divine,  
 A rest that knows no ending,  
 Which my soul's eye would fain descry  
 Though still with clay 'tis blending.  
 And Saviour dear, while I tarry here  
 Where a Father's love hath found me,  
 Oh, let me feel, through woe or weal,  
 Thy guardian arms twined round me.

Think of Newton, Faraday, and Simpson—the men who have really made the scientific discoveries, which are of a thousand times more benefit to mankind than all the volumes of imaginary guesswork that have emanated from the class of speculative theorists like Darwin and Huxley, who sneer at Holy Scripture, put together—and say whether it is unscientific to believe the Bible, or whether a Christian man of science is not as capable of making original discoveries as an agnostic one any day ? The scientist who not only learns all that science can teach him but submits to be taught higher truth from a higher source, is surely a wiser man than the scientist who vainly imagines there can be no knowledge beyond his own.