

doctrines in this manner, and to be ever anew thrusting into the very foreground of our expositions that which has so often proved an insoluble problem." He continues: "I am persuaded that only by such resignation, imposed by us on ourselves and practised towards the rest of the world, shall we be able to conduct the contest with our opponents, and to carry it on to victory. Every attempt to transform our problems into doctrines, to introduce our hypotheses as the bases of instruction especially the attempt simply to dispossess the Church and to supplant its dogmas forthwith by a religion of evolution—be assured, gentlemen, every such attempt will make shipwreck, and its wreck will also bring with it the greatest perils for the whole position of Science. Therefore, let us moderate our zeal; let us patiently resign ourselves always to put forward, as problems only, even the most favourite problems that we set up; never ceasing to repeat a hundredfold a hundred times: "Do not take this for established truth: be prepared to find it otherwise; only for the moment we are of opinion that it may possibly be so." Professor Tyndal, who made himself conspicuous, not to say notorious, as a Materialist, in his celebrated Belfast Address, frankly acknowledged that Science is surrounded by mysteries on all sides, while at the same time he lets out, almost in spite of himself, that irrepressible yearning after another world and a Divine Being which is found at the heart of every seriously intelligent man. "As regards knowledge," he says, "physical science is polar. In one sense it knows, or is destined to know, everything. In another sense it knows nothing. Science understands much of this intermediate phase of things that we call Nature, of which it is the product; but Science knows nothing of the origin or destiny of Nature. Who or what made the sun, or gave his rays their alleged power? Who or what made and bestowed upon the ultimate particles of matter their wondrous power of varied interaction? Science does not know; the mystery, though pushed back, remains unaltered. To many of us who feel that there are more things in heaven and earth than are dreamt of in the present philosophy of Science, but who have been taught, by baffled efforts, how vain is the attempt to grapple with the Inscrutable, the ultimate frame of mind is that of Goethe:

Who dares to name His Name,
Or belief in Him proclaim
Veiled in mystery as He is, the All-enfolder?
Gleams across the mind His light,
Feels the lifted soul His might,
Dare it then deny His reign the All-upholder?"

("Fragments of Science," p. 644-5). Though I cannot understand how Tyndal or Goethe could feel much difficulty in daring to "proclaim belief in God" if they did not "dare to deny his reign"; though I can scarcely imagine a more grotesque "ultimate frame of mind" or "intellectual position" than that; still, it is something for them to be so over-pressed by the arguments for God's existence and governance as to make them hold their tongues, whilst reasonable men are enforcing its truth with every possible variety of argument. Anyhow, this seems to be the position of Science—it cannot deny, and dare not, for it would contradict its own canons if it did; it cannot affirm "a belief," and dare not, for Science has nothing to do with belief, but with experiment and verification, after having taken a number of things for granted. The most we can expect it to do for us is to present us with fresh and fresh evidences of the power and wisdom of that All-wise Being with whose works it is ever coming in contact.

Having thus let Science down gently into its legitimate place, I will now proceed, without delay, to develop the first Argument that comes on my list touching the reasonableness of Christianity and the shallowness of Unbelief. This first Argument is founded on the origin and character and faculties of man. No subject could be imagined of greater interest to all of us than that which has to do with our own species, and with the position which we ourselves hold in this universe of which we form a part. The proper study of mankind is Man, and with that study we shall be engaged this evening. Indeed it not only is most interesting personally, and a proper study for all mankind, but, what is more to the purpose, it is a study of the highest scientific importance at the present day. Mr. Mott, in his remarkable address "On the Origin of Savage Life," says most truly, and Mr. Mivart endorses his words, that "questions concerning the origin of mankind have become either the radiating or the culminating points in most branches of science;" and, therefore, in treating of this subject, I am entering straight into the arena with my opponents, and am joining issue on a fundamental question, upon which not merely the past but the future of the race depends.

What, then, is the teaching of the Negative School with regard to the race of which we form a portion? What does this school proclaim as the outcome of "Science" regarding the origin of this large and distinguished assemblage which is listening to my words? If a disciple of this school were standing in my place, he would tell you that Science had achieved another victory in the discovery of your origin; and he would most probably express himself as follows:—"You desire, my dear friends, to know what you really are. I am a scientific man; I am a votary of verification and research, and I take nothing for granted, but prove everything, as I slowly advance along the arduous path of true enlightenment. I have felt that the proper study of mankind is man; and that most momentous interests depend upon the right interpretation of facts connected with our noble species. You naturally desire to know what you are, or rather whence you come, so that you may make a guess whither you are going. Well, after deep study and untiring scrutiny, I, that is to say Science, which takes nothing for granted, have come to the distinct conclusion that you have been evolved into your actual state of comparative perfection from the dirt beneath your feet. To have arrived at your present position you have gone through innumerable changes for the better. Just before you became men, you were monkeys, before monkeys, mud-fish. Of all existing apes, my great master, Mr. Darwin, says that you are immediately descended from the broad-breastboned group; and that the gorilla, of all the animal creation, is most like you in appearance. True, you have the wrist-bones of the chimpanzee, the legs of the gibbon, the bridging convolutions of the long-tailed thumbless spider-monkey, and the voice of the long-armed ape; and, therefore, we are more inclined on the whole to believe that you are

somehow or other related, in this way or that, with all the various species of monkeys that can be found in the old and new worlds. Whatever be the case, you began your being from the lowest and most brutal stage of existence; and, by a marvellous process of bettering yourselves, you have at last arrived at your present happy condition. But, mark you, this is the great and never-to-be-forgotten discovery of science, namely, that, though it admits that you have outstripped all your fellow-monkeys in the race of life, still it has found out—and you must ever firmly bear it in mind—that the difference between you and the lowest brute in the field is merely a difference of degree, not a difference of kind. You all belong to the same happy family; and some amongst you have bettered yourselves, and others have not. Hence, you see you started with a very poor stock-in-trade for getting on in the world. Your distant ancestors were dumb as brutes are dumb; they could speak no articulate tongue; they had no idea of moral duty, of right or wrong, no freedom of will, no soul; they were veritable brute beasts, without reason and without conscience, without notion of virtue or of honour; and, in point of fact, could in no way be distinguished from those irrational beasts which are now served up to you for food. This is, I know, not very flattering; but Science is Science, and it is our duty to hail its victories with joy, whatever the consequences may be. You may pride yourselves on calling yourselves ladies and gentlemen, but, to speak scientifically, a Newton, a Shakspeare, a Dante, or St. Augustine, does not differ in kind but only in degree, from the gorilla, the chimpanzee, or the baboon; and if such men as these are so situated, you might bear with patient resignation the destruction of your ancient superstitions." Or to speak seriously, in the words of Elam: "As Virchow observes, it is not altogether the question what we ourselves mean by our theories, expressed with 'modest reserve,' as what the rough and trenchant logic of the outer world makes of it. And *this* is what is made of the Evolution doctrine generally: The dog has just as long a pedigree as we have; he descends from the same original pair of vertebrata; and tracing these backwards, our common origin was a molecule or protoplasm, which had been formed by mechanical force from carbon, hydrogen, oxygen, and nitrogen. What essential difference then is there between man and the dog, and why should we hesitate to do to the one, what we do daily to the other?"* Now all this sounds very grotesque, very absurd, and very empty talk. But, for all that, I have not exaggerated the position of the Negative School in their account of the origin of man. They declare that "Science" has made this discovery; and, overawed by the dogmatic and bold assertion of those who by means of the word "Science" impose upon the multitude, thousands are beginning to believe that after all, they are merely animals, with sharper faculties than others, who have to live their day upon the earth, and then to die into it again. I need not ask you to figure to yourselves the chaos society would be thrown into if such a doctrine as this became widely acted upon, and popular. Now, my object to-night is to show that this doctrine of the Negative School is shallow; and that man is different, not merely in degree, but in *kind*, from the brute creation; that man is not a bestial animal which, by a process of gradual improvement, has at last grown out of being a bestial animal into being a man; but that he is separated by an impassable gulf from the brute creation, and possesses endowments and attributes which, in the eyes of any reasonable person, would place him as a man at once in a category by himself, far out of the reach of the highest form of mere irrational animal existences. Now, the theory of the Negative School is, that man has arrived from the brutal stage to his present perfection by going through a long, almost or quite imperceptible, course of evolutions in the direction of improvement; throwing off the brute by slow processes and degrees, and putting on the man. If such be really the case, surely we ought to be able to light upon specimens in their various stages of transition—just as we may see on some trees, buds, flowers and fruits developing at one time towards their perfection. But do we see this? Have these scientific men ever seen it? Has any traveller ever imagined that he has seen anything of the kind? If the transition be so very gradual, how does it happen that there are not thousands of creatures approaching so near to being men, and yet keeping so near to being animals that no one can tell which they are? As a practical matter of fact, have you ever read of any travellers or explorers coming upon a race of creatures in any part of the globe, however savage and unknown, which puzzled them for one single instant as to whether they were men or brutes? Have any of these bold adventurers ever by mistake shot a man, thinking him to be a brute, and sent his skin as a curiosity, or a new discovery, to his friends at home, or to some scientific society? It may be difficult to draw the line between the exact beginning of day and the ending of night, but I have never heard of any difficulty in knowing a man when you see him from an irrational brute. And why? Because they are separated by a radical difference, by a dividing line which for ever separates man from those animals over which he exerts so sovereign a mastery.

Allow me to bring before your attention a living argument in favour of the truth of what I say. If it could be proved that the most degraded type of man, the lowest form known, possessed qualities and characteristics which are common to him with all civilized men, and which animals do not possess; if it could be shown that he was thus cut off from the brute creation by profound radical differences; surely it would reasonably follow that he would also differ in his origin from irrational nature;—being radically different and *sui generis* in faculties and powers, he would reasonably be conceived as different, not merely in degree, but in *kind* from the brute creation. Now, what is generally looked upon as the lowest type that has yet been discovered? According to Mr. Mivart, a very high authority—and I believe his view is generally adopted by those who have much experience of savage life in various parts of the globe—the aborigines of Australia exhibit the lowest form of humanity that has yet been found. They, it is said, are nearest to the brute creation. "As we have said," says Mr. Mivart, "the native Australians have much pretension to the post of lowest of existing races." In another place he remarks: "The Australians are generally believed to be the most hopeless subjects of missionary effort." And of all Australian tribes the most

* Not an imaginary address.