It is impossible to state in a bolder or more unequivocal manner than Mr. Darwin does the conclusions put forth in his "Descent of Man." "Man," he says, "is descended from a hairy quadruped, furnished with a tail and pointed ears, probably arboreal in its habits, and an inhabitant of the Old World." Elsewhere he traces this ancestor back to "the most ancient progenitors in the kingdom of the vertebrata, at which we are able to obtain an obscure glance, and who apparently consisted of a group of marine animals, resembling the larvæ of existing Ascidians," and here he adds a pregnant note :—

All vital functions tend to run their course in fixed and recurrent periods, and with tidal animals the periods would probably be lunar ; for such animals must have been left dry or covered deep with water,—supplied with copious food or stinted—during endless generations, at regular lunar intervals. If then the vertebrata are descended from an animal allied to the existing tidal Ascidians, the mysterious fact that with the higher and now terrestrial vertebrata, not to mention other classes, many normal and abnormal vital processes run their course according to lunar periods, is rendered intelligible. A recurrent period, if approximately of the right duration, when once gained, would not, as far as we can judge, be liable to be changed ; consequently it might be thus transmitted during almost any number of generations. This conclusion, if it could be proved sound, would be curious ; for we should then see that the period of gestation in each mammal, and the hatching of each bird's eggs, and many other vital processes, still betrayed the primordial birthplace of these animals.

Such are some of what Mr. Darwin himself calls the "highly speculative views" that are to be found amid one of the most striking arrays of scientifically arranged and ascertained facts that has ever been published.

MODERN SCIENCE.

ADDRESS OF PRESIDENT J. L. SMITH AT PORTLAND.

DARWIN'S THEORIES COMBATTED—RELATIONS OF RELIGION AND SCIENCE—A TRIBUTE TO TYNDALL.

The address of J. Lawrence Smith, the retiring President of the American Association for the Advancement of Science, of which the following are the most significant portions, was read by Prof. Putnam, the Secretary, on Friday, the President being absent in Vienna :

DARWIN'S THEORIES.

It is not my object to criticise the speculations of any one or more of the modern scientists who have carried their investigations into the world of the imagination ; in fact, it could not be done in a discourse so limited as this, and one only intended as a prelude to the present meeting. But in order to illustrate this subject of method more fully I will refer to Darwin, whose name has become synonymous with progressive development and natural selection, which we had thought had died out with Lamark 80 years ago. In Darwin we have one of those philosophers whose great knowledge of animal and vegetable life is only transcended by his imagination. In fact, he is to be regarded more as a metaphysician with a highly-wrought imagination than as a scientist, although a man having a most wonderful knowledge of the facts of natural history. In England and America we find scientific men in the profoundest intellects differing completely in regard to his logic, analogies, and deductions ; and in Germany and France the same thing—in the former of these countries some speculators saying "that this theory is our starting-point," and in France that many of her best scientific men not ranking the labors of Darwin with those of pure science. Darwin takes up the law of life and runs it by progressive development to doing this he seems to me to increase the embarrassment which surrounds those looking into its mysteries. Having done so, he is not satisfied to leave the laws of life where he finds them, or to pursue their study by logical and inductive reasoning. His method of research does not allow him to remain at rest ; he must be moving onward in his unification of the universe. He starts with the lower order of animals, and brought them through their various stages of progressive development, he supposed he had touched the confines of man ; he then seems to have recoiled, and hesitated to pass the boundary which separated man from the lower order of animals ; but he saw that all his previous logic was bad if he stopped there, so man was made the result of a cycle which we one can find fault, if the descent be legitimate). This unbroken logic pushes him still further, until he can find some connecting link between that most remarkable property of the human brain called expression ; so he logically has placed in a very curious and readable treatise on that subject. Yet still another step must be taken in this linking together of man with the lower order of animals ; it is in connection with language ; and before long it is at last announced as the result of deduction from that most wonderful and ingenious intellect on the connection between the language of man and the brute creation.

DARWIN'S METHODS AFFLIED.

Let us see for a moment what this reasoning from analogy would lead us to. Any one would has as much right to revel in the imaginary formation of sodium from potassium, or iodine and bromine from chlorine, by a process of development, and call it science, as for the naturalist to revel in some of the wild speculations of the day the physicist who studies the stellar space to imagine is permitted by mind as well as light—mind such as has formed the spoot, the statesman, or the philosopher. Any one of these would quit the field of investigation, or marking every foot of his advance by some indelible imprint, and go back to the speculations of Albertus Magnus, Bacon, and other alchemists of former ages, would soon be dropped from the list of chemists and published with demeanor speculators.

What I have said is, in my humble opinion, warranted by the departure Darwin and others have made from true science in their purely speculative studies ; and neither he nor other scientific truth expected to hazard great and startling opinions without at the same time spurning and desiring criticism ; yet discussion from his views is to say proves him wrong—it only shows how his ideas fall in the minds of others.

And here before we continue the slaying of Darwin with

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