

in opposing camps—compared to which, Woolseley's camp, and that of the king of the Ashantees, are friendly to each other. On both sides we perceive dogmatism—and “dogmatism in matters of science,” says Creation's Testimony, “is the more intolerable, seeing that the so-called demonstrations of one age have sometimes been the butt and ridicule of succeeding generations.” Is it not true that much of what we, who are still among the quick, hold to be most firm in science, receives rude shocks from time to time. Dalton's theory of atoms—the very base and groundwork of our chemical fabric—is overthrown, or attempted to be overthrown, by speculations touching electric conduction and the *nature* of matter; and *that* overthrown, would entail the subversion of all ordinary scientific ideas regarding the nature and relation of matter and force. The whole science of physiology has undergone remarkable changes since many of those now listening to me first acquired a partial knowledge of its principles; while in chemistry, the whole nomenclature is changed. (But those changes in chemical and in physiological science partake, no doubt, of the general evolution of things.) If we are in doubt whether the fibrin of the blood is highly developed albumen, itself formed from the food we eat; or, whether it is albumen which has already served its purpose in the economy, matters little, for we are brought into contact with a protoplasm by Mr. Huxley; with physiological units by Mr. Spencer; with osmosis by Mr. Darwin; with the dynamic principle of the universe; and these embrace all that is known in the *natural* world; while Mr. Buckle completes the *moral* view by his nice and easy balancing of the virtues and vices. Beyond these, it is scarcely necessary to go for an elucidation of everything that formerly *appeared* hidden to all their and our predecessors. How measure our gratitude!

Of the first and greatest—Darwinism—where it will lead to, and where it will stop, if it ever does stop, are matters of conjecture. M. Cauret, a disciple of Moquin Tandon, a disciple of Darwin, says: “man is a mammifer of the order primates, constructed for the erect position, and separated from the anthropomorphic apes by characters of often less importance than those which separate the anthropomorphic from the inferior apes.” Very flattering, indeed, to the apes! He smiles at the attempt of Geoffrey St. Hilaire to erect a human kingdom on physical qualities, as the final limit of the admiration of man for man—“le dernier terme de l'admiration de l'homme pour l'homme.” The *British and Foreign Medico-Chirurgical Review*, for October, 1870—

from which I quote—remarks that “the school of philosophers who believe that they can persuade mankind that they are nothing more than developed monkeys must have an admiration for their own abilities which cannot possibly be surpassed, although the fact of their holding the belief testifies to the very low estimate they must have formed of the thinking faculties of other people.”

Dr. Bastian endeavors to prove the *spontaneous* origin of life. He *thinks* he produces from *dead* matter, and from the centre of certain crystals (the neutral ammonia tartrate for instance) certain spores and filaments which have a considerable resemblance to those of true organic matter! No doubt, from something having a *resemblance* to true organic matter, healthy living organisms will, in the course of time, be produced, and *when* produced, and handed over to Darwin, mounting with him “through the various spires of forms” they will go on from one gradation to another, from the *resemblance* to, organic matter, till man, to the highly developed monkey appears upon the scene! The fact, he says, that animals “with such distinct and specific organs, and of different sexes too, should arise in this definite manner from the reproductive products of a plant will, doubtless, seem to flavor more of fable than of fact.” And in this we may safely agree with him. Life, with him, arises by what he styles archebiosis. But, says the Reviewer, who seems to imply a doubt in Bastian's veracity, it is necessary that all his experiments, amounting to more than a thousand, should be repeated by some one “who takes no share in the polemics of the day.”

Winwood Reade, not to be outdone by Bastian, seizes man before he is ushered into this sinful world, (Liebig waited till the baby was born before he dissected it) and thus deals with him: “At last the hour of birth approaches; coiled within the dark womb he sits, the image of an ape; a caricature and a prophecy of the man that is to be. He is born, and for sometime he walks only on all fours; he utters only inarticulate sounds, and even in his boyhood his fondness for climbing trees would seem to be a relic of the old arboreal life. Since, therefore, every man has been, himself, in such a state that the most experienced observer could not, with the aid of the best microscopes, have declared whether he was going to be man or plant, man or animalcule, man or mollusc, man or lobster, man or fish, man or reptile, man or bird, man or quadruped, man or monkey” (still harping on the monkey) “why should it appear strange that the whole race had also its animalcule and its reptile days. But, whether it appears strange