

53 (8 October 1891) 283.

Essays, Scientific, Political and Speculative.

By Herbert Spencer. Library Edition, containing seven essays not before re-published, and various other additions. 3 vols., 8vo, pp. 478, 466, 516. With an alphabetical index. D. Appleton & Co. 1891.

CSP; identification: MS 1365. See also: Burks, *Bibliography*. This review is unassigned in Haskell's *Index to The Nation*, vol. 1.

Herbert Spencer (1820-1903) was an English sociologist and popularizer of the terms "evolution" and "survival of the fittest." He attempted in his writings to apply Darwinian theories to social development, but succeeded only in becoming one of the most controversial figures of his time.

The theory of ethics which has latterly been taking shape under the hands of Stephen, Spencer, and others, is from a practical point of view, one of the most important boons that philosophy has ever imparted to the world, since it supplies a worthy motive to conservative morals at a time when all is confused and endangered by the storm of new thought, the disintegration of creeds, and the failure of all evidences of an exalted future life.

The little of new wisdom is contributed to the ethical theory in the present edition of Mr. Spencer's essays is contained in the essays on the "Ethics of Kant" and on "Absolute Political Ethics." It was hardly to be expected that the additions would go to enhance Mr. Spencer's well-built-up reputation. The popularity of his doctrine has probably passed its meridian. In one of the new essays, he quotes with admiration Huxley's fine saying, "Science commits suicide when it adopts a creed." That is just the principle of death lurking in Spencer's philosophy. It is a creed in that it is erected upon axioms founded only on the inconceivability of their contradictory opposites, and regarded as absolutely indubitable. One of the seven essays mentioned on the title-page refers to the discussion concerning the a-priori origin of axioms. Few psychologists, if any, would now dispute the instinctive origin of the ideas from which the three laws of motion have become evolved under the influence of experience and reflection. But it is a widely different thing to say that these laws are without doubt exactly true. For such a belief there cannot be the slightest warrant. In the same way, it may be true that all scientific reasoning postulates something which men seek to formulate as the general uniformity of nature; but it by no means follows that reasoning cannot discover that this postulate is not exactly true. That would be like insisting that because astronomy rests on observations, therefore the astronomer cannot deduce from these observations their probable error. Science or philosophy cannot itself commit suicide; but a method of inquiry which provides no means for the rectification of its first principles, has mixed and swallowed its own poison and has to expect an inevitable doom. What explains the success of modern science is that it has pursued a method which corrects its own premises and conclusions. It reminds us of certain methods of arithmetical computation where mistakes of ciphering have no effect but what disappears as the process goes on. In like manner philosophical inquiry, which necessarily begins in ignorance, must not pursue a method by which the error of its first assumptions is allowed to retain its full effect to the end, or else it will come to naught.

The most interesting of the new essays is that "On the Factors of Organic Evolution," in which the author urges almost irresistibly the indirect evidence of the transmission of acquired characters. As in the question of spontaneous generation, the direct evidence is feeble, if not quite wanting. But the force of general facts and indirect considerations would appear, at least to onlookers of the controversy, as sufficient to remove all doubt. Spencer well says that many of the modern evolutionists are more Darwinian than Darwin ever was; yet in part the reverse is true. The intellectual motive which has prompted evolutionary speculation in biology is the desire to discover the laws which determine the succession of generations. This involves in some sense a "postulate" that the phenomena are subject to law; but to jump to the assumption made by neo-Darwinians that the form of each individual is a mathematical resultant of the forms of its ancestors, is not to be more Darwinian than Darwin, but, on the contrary, it is seriously to maim his theory.

Spencer cites the old dogma that Nature abhors a vacuum as an example of a merely verbal explanation. A reader of Boyle's attack upon the maxim, made while it was a living belief, would hardly so judge it, since Nature was conceived as a sort of living being mediating between the Creator and the universe. Yet, as Nature's abhorrence of a vacuum remained somewhat unreasonable, Spencer is right in saying that the theory gave little help towards understanding the facts. But what, then, shall we say of a theory which proposes to explain all growth and its inexhaustible manifold of results by the law of the conservation of energy—that is, by a mere uniformity in the motion or matter, a mere general description of certain phenomena? To suppose an intelligence, provided only we can see it acts intelligently, is to suppose that which is intelligible *par excellence*. But to suppose that blind matter is subject to a primordial law, with nothing but an Unknowable beyond, would seem to leave everything as incomprehensible as well could be, and so fail completely to fulfil the function of a hypothesis.

Besides, the law of *vis viva* is plainly violated in the phenomena of growth, since this is not a reversible process. To explain such actions—of which viscosity and friction are examples—physicists resort to the consideration of the chance encounters between trillions of molecules, and it is an admirable scientific feature of the Darwinian hypothesis that, in order to account for a similar irreversible operation, that of growth, it equally resorts to the doctrine of chances in its fortuitous variations. The attempt of some of Darwin's followers to drop this feature of the theory is unscientific. It is also destructive of the theory, for if any laws of heredity are followed with mathematical exactitude, it becomes at once evident that the species of animals and plants cannot have arisen in anything like the manner in which Darwin supposed them to arise.

Another interesting part of this essay is where the author draws attention to the strong evidence of an enormous direct effect upon animal and vegetable forms due to the circumambient element. Such considerations strengthen Mr. Clarence King's suggestion that transmutations of species have chiefly been caused by geological changes of almost cataclysmic magnitude and suddenness, affecting the chemical constitution of the atmosphere and ocean.

In the essay, or prepared "interview," on "The Americans," Spencer holds, it will be remembered, that we carry the gospel of work too far.