say of him that he is its metaphysician, as Stuart Mill is its logician and psychologist. The author renders a just tribute to the extent of his knowledge, to the loftiness of his views, and to that vast and powerful synthesis with which he summarizes all the work of his predecessors connecting it with a universal philosophy of things, with the supreme law of evolution.]

"But where are Mr. Spencer's academic honors?" tacitly asks "Outsider"; "the title pages of his books bear none." Here there is some excuse for the implied conclusion, for it is so rare a thing for an author to refuse distinctions accorded by learned bodies, that every one naturally supposes the absence of them to imply the absence of offers. In this case, however, it happens to be otherwise. Mr. Spencer's American friends have long known that he disapproves of honorary degrees, and the like and never accepts them. I learn from Mr. Spencer that in 1871 he was offered the degree of LL.D., which he declined for the assigned reason that such honors habitually come when they are no longer wanted and are withheld at the times when they would be encouragements. While he was President of the Royal Society, Sir Joseph Hooker pressed Mr. Spencer to become a Fellow of it, but he did not accede. When the Royal Academy of Rome, founded by Galileo, and long existing in a state of suspended animation, was revived after the political power of the Pope had been abolished, Mr. Spencer was among those foreigners first affiliated to it; he is now a member only because it was urged upon him that withdrawal might be injuriously misconstrued. In 1880 he was elected by the Royal Academy of Turin, in 1882 by the Royal Society of Naples, and in 1883 by the American Philosophical Society, but in each case declined, as before. In 1883 he was almost unanimously elected by the French Academy, there being three dissentients only. Nevertheless, as the daily papers of the period might have told "Outsider," he did not accept. Lastly, in 1888, on the celebration of the eight hundredth anniversary of the oldest university existing, that of Bologna, the degree of Doctor was conferred on Mr. Spencer, notwithstanding his intimation that he could make no use of it.

The foregoing statement, made so long by the numerous facts to be set down, has been in great measure rendered compulsory by the reiterated demand of "Outsider" for information, backed by the expressed editorial wish of THE TIMES "to see his position thoroughly discussed." Being in possession of the particulars called for, to withhold them would be apparently to admit the truth of "Outsider's" insinuations. As the facts are diametrically opposed to what he tacitly affirms, it has appeared imperative, in justice to Mr. Spencer and to prevent the diffusion of wholly erroneous beliefs, to set the facts forth. "Outsider" said he would like to be told what the facts are, and now he has been told. Whether he "likes" the information may reasonably be doubted. His obvious purpose was to discredit Mr. Spencer's teachings and to shame his American friends. Unhappily for him he has succeeded in doing the reverse.

When Macaulay's "History of England" was criticized in the Quarterly Review it was said of Croker, the editor who wrote the article, that he intended to commit murder, but instead committed suicide. May not the same thing be said of "Outsider?"

W. J. YOUMANS.

NEW-YORK, Wednesday, April 23, 1890.

Janes, Lewis G.
1890 "The Grandeur of Spencer's System,"
The New York Times, vol. 39 (Sunday, 27 April),
page 13, columns 3-4.

THE GRANDEUR OF SPENCER'S SYSTEM.

NOT MECHANICAL BUT VITAL—A GREAT PREDICTION VERIFIED--SPENCER'S OWN VIEW OF THE LIMITS AND RESULTS OF HIS WORK.

To the Editor of the New-York Times:

It is the misfortune of the critics of the philosophy of Mr. Herbert Spencer that, almost without exception, they demonstrate to careful students of that philosophy the superficial character of their acquaintance with its principles. I intentionally use the term "misfortune" rather than "fault," because I do not wish to impute to such critics any deliberate intent to misrepresent Mr. Spencer's positions, and because, moreover, it is little wonder that the ordinary mind, even of the cultivated and studious man, is unable to grasp the wonderful synthesis of materials which the great philosopher has wrought into a harmonious and perfect system of thought in all of its logical bearings and implications.

The gentleman whose communications have given rise to the discussion on Mr. Spencer's philosophy in your columns, who hides his personality under the modest pseudonym of "Outsider," is, I think, to be included in the class of critics which I have above described. He has acquainted himself with its main positions severally and in detail, but without exercising upon them that comprehensive grasp of mind which would enable him rightly to judge of their unity, sufficiency, and logical validity as parts of a consistent system. Some of "Outsider's" criticisms have already received sufficient answer from the able correspondents who have taken part in this discussion. Two or three points, however, it appears to me call for further comment and elucidation. Permit me to avail myself, briefly, of the courtesy extended to the public, and to say a word upon these points.

1. As regards the original criticism of "Outsider" upon Mr. Spencer's method of reasoning, it seems to me that more might justly be said in his defense. "R. G. E.," for example, in his first communication in reply to "Outsider," in your issue of March 30, in my judgment concedes too much to Mr. Spencer's disadvantage. If we carefully examine the first four sections of the "First Principles" we shall see that Mr. Spencer makes no claim that the method therein laid down amounts to a demonstration of absolute certainty.

He merely affirms that the comparison of various beliefs in respect to some subject-matter and the elimination of points of difference will enable one to arrive at a probable hypothesis, and that the hypothesis arrived at, "if not to be set down as an unquestionable verity, may yet be considered to have the highest degree of probability."

The application which "Outsider" attempts to make of this method is wholly unwarranted. The comparison of all opinions on a given subject-matter, and the cancellation of their differences, could never result in the justification of ephemeral beliefs which have "sprung from temperamental hopes or superstitious fears acting in a field of utter ignorance." Such beliefs would most certainly rest upon the eliminated differences instead of the consentient residue of opinion. Take, for example, the illustration given by "Outsider." The observation of the movements of the planets and of the orderly arrangement of the heavenly bodies give rise to two kinds of deductions, the one scientific and the other superstitious and chimerical. In a problem like this the subject-matter to be dealt with includes both classes of deductions. Concerning these heavenly bodies and their movements the opinions, therefore, of both astronomers and astrologers are to be taken into account. The former affirm merely certain ascertained physical facts and their observed relations. The latter affirm also that the planetary movements produce certain occult influences on the lives of men. When the opposing opinions are canceled, what remains? Evidently the statement that the heavenly bodies move--this and nothing more. If it be affirmed that all astronomers were formerly astrologers, the onus of proof rests on the one who makes the affirmation. Even admitting this, however, and canceling the divergent opinions of different astrologers, what will remain? Merely the general affirmation that the heavenly bodies influence the destinies of men. In the case of the sun science has demonstrated this to be a more wonderful and far-reaching truth than astrology ever dreamed of. Lunar influences on the world and its destinies are also scientifically demonstrable, while the remotest star doubtless helps to hold our solar system in orderly relations to the distant galaxies through the law of gravitation, and so indirectly affects the lives of men. The conception that "there is a soul of truth in things erroneous" is no doubt foolishness to a bigot or narrow-minded adherent of some metaphysical creed, but it marks the true greatness and prescience of Mr. Spencer's intellectual method.

2. "Outsider" affirms that Mr. Spencer's conception of evolution is purely mechanical; "that his philosophy implies that life is a special kind of mechanism, and consciousness is an aspect of a special kind of life." From this assumed premiss he deduces certain absurd imaginary hypotheses which "he has heard that this was equivalent to saying." One can hardly be expected to reply to an alleged argument or objection based upon doubly anonymous hearsay. As to this characterization of Mr. Spencer's philosophy as "mechanical," however, it would appear that a principle based mainly on the observation of biological changes, and drawing its most noteworthy illustrations from the growth and practical activities of living beings, might with greater propriety be termed vital instead of mechanical. What Mr. Spencer has really done, however, is to unite vital and mechanical principles in a deeper synthesis which includes and harmonizes both. When we recollect that, according to the Spencerian philosophy, all the phenomena

of sense-perception are purely relational and symbolical, that matter itself is merely the mode in which the unknown reality affects the human consciousness through the finite limitations of our senses, that its ultimate nature is wholly inconceivable, and that, as "R. G. E." has affirmed in his latest contribution to this discussion, "mechanics is merely the equivalence of law and order" as opposed to chance, caprice, and miracle, then it is evident how futile and puerile is this objection to Mr. Spencer's philosophy. Only to the immature understanding does it appear that capricious and unpredictable activities would be indicative of a higher order of being than that orderly mode of activity which is termed "mechanical." To say that a system of thought is "mechanical," that it deals with definite and ascertainable relations, and with predicable results in action, is in the minds of certain critics to condemn it utterly. Definite, fixed, and ascertainable relations between phenomena imply to such minds the negation of intelligence and vitality. To the scientific mind, on the contrary, they imply the highest intelligence, and the manifestation of growth force under the most perfect possible conditions.

3. In his latest communication "Outsider" quotes with manifest approval, because derogatory to Mr. Spencer, Prof. Osborn's tacit indorsement of Weismann's theories as to the non-transmission of acquired characters. Though these theories have met with favor in some quarters, and are regarded by an authority as eminent as Mr. Alfred Russel Wallace as strengthening the argument for "natural selection"--vide "Darwinism"--it cannot be said that they have received the indorsement of the scientific world. They are strongly combatted in a recent work ("Organic Evolution as the Result of the Inheritance of Acquired Characters According to the Laws of Organic Growth") by Dr. Eimer, Professor of Zoology and Comparative Anatomy at Tübingen, whose arguments are based on many years of careful investigation in the field of zoology, conducted with a thoroughness and conscientiousness reminding one of Darwin himself, and whose conclusions agree substantially with those of Lamarck and Spencer.

4. "The recognized touchstone of scientific theory is successful prediction," says "Outsider," and he challenges Mr. Spencer's adherents to apply this test to the synthetic philosophy. Though Mr. Spencer's earliest studies were in the practical fields of entomology and botany, and he has also done some original work in others of the special sciences, the main labor of his life, as is well known, has not been in this particular field. His fame will ultimately rest upon that rarer faculty of generalization and synthesis which has enabled him to unite the laws and facts of the special sciences into a veritable scientia scientiarum--a true philosophical system. He brought to this higher field of labor, however, a mind trained in the method of scientific research, and which had already been brought to the test which "Outsider" indicates.

More than thirty years ago Mr. Spencer published a noteworthy essay on "The Nebular Hypothesis," (Westminster Review, July, 1858.) This essay was published at a time when this hypothesis had fallen into disrepute. It defended the nebular theory against the current criticisms of scientific men, subjecting the opposing arguments to acute analysis, and affirming unhesitatingly that the solar system originated not by manufacture but by evolution. Many of the positions affirmed in this essay have been strikingly confirmed by subsequent discoveries through the aid of the telescope and spectrum analysis. The nebular hypothesis has been rehabilitated, and is now generally

accepted in some form by all astronomers and physicists. "Practically demonstrated as this process now is," as Mr. Spencer declares, "we may say that the doctrine of nebular genesis passes from the region of hypothesis into the region of established truth." The discovery of the satellites of Mars was an exact confirmation of his law of planetary genesis, though it at first appeared, owing to an acceptance of Arago's erroneous statement as to the density of that planet, that it would militate against the hypothesis. Mr. Spencer's conclusion was that "the satellite-forming tendency which each planet had will be approximately indicated by the proportion now existing in it between the aggregating (centripetal) power and the power that opposed the aggregation (centrifugal.)" Correcting the mistake of Arago, the application of this law shows that Mars should have either two or three satellites. When Mr. Spencer's essay was written it was believed to have none; but nineteen years later two were discovered.

That the so-called "mechanical philosophy" of Mr. Spencer--nowhere better illustrated than in his theory of the growth of the stellar systems--is by no means an atheistic or materialistic explanation of the universe appears in the closing paragraph of his essay on "The Nebular Hypothesis"--for a copy of which, with recent addenda, I am indebted to Mr. Spencer himself:

"It remains only to point out that while the genesis of the solar system, and of countless other systems like it, is thus rendered comprehensible, the ultimate mystery remains as great as ever. The problem of existence is not solved; it is simply removed further back. The nebular hypothesis throws no light on the origin of diffused matter; and diffused matter as much needs accounting for as concrete matter. The genesis of an atom is not easier to conceive than the genesis of a planet. Nay, indeed, so far from making the universe a less mystery than before, it makes it a greater mystery. Creation by manufacture is a much lower thing than creation by evolution. A man may put together a machine, but he cannot make a machine develop itself. That our harmonious universe once existed potentially as formless diffused matter, and has slowly grown into its present organized state, is a far more astonishing fact than would have been its formation after the artificial method vulgarly supposed. Those who hold it legitimate to argue from phenomena to noumena, may rightly contend that the nebular hypothesis implies a first cause as much transcending 'the mechanical God of Paley' as this does the fetish of the savage."

For the establishment of evolution as a universal method and the formulation of its law--a work transcending in importance that of Newton--the world is indebted to Mr. Spencer. The physical sciences--thanks to Darwin and the biologists as well as to Spencer--are already organized on an evolutionary basis, and are pushing forward to new discoveries. Psychology, sociology, and morals will follow, with results replete with practical benefits to mankind. Religion will grow more reverent and more worshipful as it contemplates the unsearchable mystery of creation and life. With the law of evolution as a clue, science will make more rapid progress during the next century than ever before in the world's history.

And coming generations will look up to Herbert Spencer as to the greatest of the world's philosophers--great indeed in his mastery of speculative research, but greater in the illuminating power of his teaching upon the practical problems of our daily life.

Let me beg "Outsider" to get in out of the cold before it is too late.

LEWIS G. JANES,
President of the Brooklyn Ethical Association.
NEW-YORK, Wednesday, April 23, 1890.
