

now given it over to public keeping. Like so much of Rousseau's work, it was preceded by a rough draft. There have been elaborate studies of Rousseau as botanist and as musician, but his interest in chemistry has escaped notice, being, indeed, slurred over in the 'Confessions,' to which M. Dufour furnishes an illuminating note on the subject of Baron d'Holbach's employment of Rousseau in 1757 to dress up a "manuscrit de chimie" for him, and to place it with a publisher. Rousseau's dabbling in chemistry began (almost disastrously) at Chambéry in 1737. In 1743 he was attending a course in chemistry under Rouelle, with M. de Francueil, and resumed the study in the following year after the Venetian episode; in 1747 at Chenonceaux he was still occupied with the subject along with literary and musical composition. Ten years later, as we have seen, he was summoned in as a two-fold expert by Baron d'Holbach. In all his wanderings he preserved the unfinished 'Institutions Chymiques,' and bequeathed it with other papers to his literary executor, M. Moutou.

—M. Dufour now looks for the publication of the find, and no doubt it will receive the consideration of the new Société J.-J. Rousseau just getting into working order in Geneva. Over and above its Archives, it contemplates a periodical publication (*Annales*) of memoirs and documents and reviews of new Rousseau literature, and eventually a complete bibliography; an authentic Life, with a critical edition of the 'Confessions'; an exact edition of Rousseau's correspondence and of his works in general. We gladly call attention once more to this interesting enterprise, which invites support from all quarters of the globe. The annual membership fee (which includes subscription to the *Annales*) is twelve francs; life membership a hundred (or not less). The president is Prof. Bernard Bouvier, Bourgade-Four 10; treasurer, M. Alfred Cartier, place Bel-Air 12. Forms of application with other documents may be had of the secretary, M. Maurice Trembley, Petit-Saconnex, Geneva.

—Recent travellers from Spain report that one of the apparent results of the loss of the Spanish colonial empire to the home country is a widespread commercial and industrial activity, affecting all sections of the country. The new national energy penetrates also the intellectual field, and a significant sign that the movement is not a temporary ebullition is the fact that those who dominate the revival frankly recognize the meaning of the past and the present, and are determined that the nation shall learn and profit by what they teach. It is a fair question whether the scholars of any other European race would care, or dare, on the morrow of national defeat, to begin the publication of material for the study of the history of the colonial domain whose last vestiges had just been wrested from them. Spanish historical students have done much in the past to make accessible the documentary records of their national activities in America and Asia, and those of the present day who are taking up the work give every promise of meeting the demands of contemporary standards as fully as their predecessors met those of a previous century. The first three volumes of the new "Colección de Libros y Documentos referentes a

la historia de América," published by Sr. Victoriano Suárez of Madrid, make a most promising beginning. The first contains an account of the Jesuit missions in the Maynas country, at the headwaters of the Amazon, written by P. Francisco de Figueroa. P. Francisco was one of the two missionaries who established the earliest stations in that region, and his narrative, which contains a chapter on the natives, is a useful check on the account by his companion, P. Acuña, on which students have heretofore had to rely for knowledge of their undertaking. The second and third volumes contain two of the five parts of the 'Quinquenarios,' or 'Historia de las Guerras Civiles del Perú,' by Pedro Gutiérrez de Santa Clara, which is edited by Sr. D. Manuel Serrano y Sanz.

—Gutiérrez de Santa Clara appears to have been the son of a Spanish settler who attained a respectable position in Mexico as a public scribe, a vocation which doubtless accounts for the son's literary gifts. Young Pedro, while still a mere boy, went off to try his fortune in the regions where Pizarro was making life in Mexico seem sadly monotonous. He became secretary to Lorenzo de Aldana, one of the conquistadores, who is remembered chiefly because of the foresight and skill with which he anticipated each change in the fortunes of the successive winners in the struggles for the domination of Peru. Aldana knew men and affairs, and he found in Gutiérrez a most competent assistant, who possessed that primary requisite for a successful private secretary, a retentive memory. For his use of this, historical students are under deep obligation to him. Gutiérrez knew intimately the men in every party to which his chief belonged in turn, and he was in a position to understand the significance of all that happened. His contribution, however, does not so much consist in new facts and motives, which were already set forth in the numerous official documents and correspondence previously published. What makes his narrative exceptionally valuable is the intimate personal anecdotes and illuminating descriptions of episodes which become significant when the manner of their happening is made known. When the new exponent of the events of these sorely troubled decades in American annals writes his much-needed history of Peru, he will find Pedro Gutiérrez as useful to-day as he was to Aldana 350 years ago.

#### ROYCE'S SPENCER.

*Herbert Spencer: An Estimate and Review.* By Josiah Royce. Together with a Chapter of Personal Reminiscences, by James Collier. Fox, Duffield & Co. 1904.

Exactly one-half this volume is occupied by Professor Royce's estimate of Spencer. Such a review by so very eminent a philosopher of one of his elder contemporaries should be of great and permanent interest. It will not, however, add to its author's reputation. Five different meanings of the term "evolutionist" are given; and yet a very important meaning is omitted—that in which Aristotle was an evolutionist, since he certainly based his central conception on the idea of a plant coming up from seed, or upon something of the sort. Aristotle is represented by Professor Royce as one of the two great anti-evolutionists of Greece,

in some sense hard to understand from the few sentences he devotes to this matter. But doubtless many of Professor Royce's readers will agree with Zeller that, from the passages which the latter cites in Aristotle, the continued evolution of higher perfection "erheilt." To some of us it appears to be chiefest of the differences between the historical Aristotle and the imaginary Aristotle of the scholastics that the former makes the form to grow out of the matter, and continually to increase in perfection in the passage through the vegetable and animal kingdoms to man. However, Professor Royce has earned so much credit for accuracy that we cannot doubt that in this difficult matter he has chapter and verse ready for citation.

Having sketched the general history of evolution in bold and strong lines, he reviews the origin and significance of Spencer's own view of evolution. This Englishman's extraordinary innocence regarding every sort of nexus between his own philosophy and that of any remote period or foreign country receives due notice, as well as his failure to regard philosophical thought as itself an evolutionary process in which his own thinking had an organic place. His unemotional, direct, plain, and simple mental build is very well described, and brings up to our minds the picture of a common American balloon-frame house with the conventional gable and ell, with its own reasons for being as it is and not the slightest suspicion of any reason for being otherwise. A great deal of attention is bestowed upon Spencer's invalidism, which is attributed in large part to eye-strain, in accordance with the general theory of Dr. G. M. Gould.

Professor Royce next goes on to give his own restatement of Spencer's principle in these four propositions: (1) that if the parts of any large body are as nearly alike in any specific respect as they then can be, this homogeneity will be unstable; (2) that the differentiating mass, as it ages, will react by its various structure upon the play of the external forces which impinge upon it; (3) that, as the body slowly integrates, the energies within and about it tend to assume an orderly character; and (4) that "evolution is the consolidation of a mass of matter, attended by a loss of some of the energy that this mass contained; while, as this consolidation takes place, both the matter concerned and the energy which it still retains pass from a state in which there is little firmness of structure, little orderliness of arrangement, little sharpness of contour, and much inner resemblance of part and part, to a state in which there is great firmness of structure, much orderliness of arrangement, much sharpness of contour, and much inner variety of part and part." Evolution being thus completed, the reverse process of dissolution begins.

Professor Royce passes to a criticism of Spencer in something less than four thousand words, or, say, two pages of the *Nation*. Here we remark the fairness and catholicity which might confidently have been anticipated. He finds Spencer's limitations to be "as obvious as it is unfair to make one's judgment of him dependent upon them." "The real question is, How far did he help people to understand evolution?" He ought not to be condemned because he undertook to conceive of evolution in mechanical terms. "He would

have been false to his just philosophical purpose had he conceived it otherwise."

The Spencerian will derive great comfort from the different attitudes of the idealist and the logical scientist toward his master. The fault which each finds with Spencer is a virtue in the eyes of the other. The latter objects that cosmology, because of its immense variety, cannot possibly be deduced as a consequence of a fixed law, such as that of the "persistence of force," which will not of itself suffice even to explain a steam-engine. To do this the second law of thermodynamics has to be invoked; and this law, as Maxwell first showed and as is now universally acknowledged, merely provides that nothing shall interfere with certain chance distributions; for an intelligent demon opening a door for molecules that happened to be moving with particularly high velocities in one way as well as for those moving with particularly low velocities in the other way, would produce the effect which this "law" denies. It thus has a character opposed to that of ordinary definite laws, since these provide that mere chance is not to have its way. The physicists further object that, so far as Spencer explains any phenomena of nature, he virtually bases his explanation on a principle quite independent of that of the "persistence of force," and, moreover, that many of his deductions are too vague to have any value as explanations, although they may be valuable as general descriptions of the course of nature. On the other hand, they admit that he did well in putting the emphasis he did upon the distinction between *simple* and *compound* evolution; the former describing histories such as that of a planet, and the latter, histories such as that of a plant or of a race of plants. These objections are familiar to all who have any acquaintance with the world of physical research. They are worth recalling, however, because their contrast with the objections of Professor Royce brings out the distinctive character of the idealistic views; and we may presume that Professor Royce intended to mark this contrast. He is very explicit in bracketing the two laws of thermodynamics as of precisely equal rank, the one determining the *quantity*, the other the *direction*, of change, and is equally explicit in praising Spencer for reducing all the transformations of the physical universe to this *single* invariant type. Nor has he one word of fault to find with his deductions as being too vague. A reader who should know no other writing of Royce than this would think him substantially a Spencerian like Youmans; for the only objection he makes is that simple and compound evolution ought not to be described as a *single* process. But the question whether Spencer does as a matter of fact describe them as a single process or as two processes would appear, to the Spencerian and to the physicist alike, to be little more than a question of words.

The third quarter of the volume is given to a criticism by Professor Royce of Spencer's educational theories, which, by the way, have no apparent connection with the doctrine of evolution. They are treated with much greater severity than is that doctrine, and the last paragraph of this part reads as follows: "Let us honor him for

what he was. But let us be glad that he is not the trainer of our children."

The volume is brought to a close by some personal reminiscences of Spencer by Mr. James Collier, who was for nine years his secretary, and for ten his amanuensis. It is as good a personal portrait as any we call to mind; not speaking, of course, of large books. It begins by saying that Spencer was no recluse, and telling where he might often be seen in London. The places mentioned do not include any at which he would be drawn into serious discussions; and though, besides the places mentioned, he could be found, for many years, almost every evening at the Athenæum, upon the committee of which he served, yet he did not join the conversation circle there, but played a certain number of games of billiards and went home to bed. It was only his sworn adherents who could see much of him. It was that vast work which so absorbed him that sometimes, having of his own motion brought about an interview, when the occasion came he found he must not talk. Yet, let an attack be made upon any position he had taken, and instantly upon hearing it read out he would be ready to dictate his reply, for two or three hours, without wishing to make any corrections. On such occasions, his grasp seemed Napoleonic. In short, he had converted himself into an apparatus for performing that one task, and he had no passions or intuitions which in any way deranged his adjustment to that.

That he certainly was a wonderful thinker in his peculiar way appears much more clearly now that his work is done. Mr. Collier says he never read any book of philosophy except Mansell's "Prolegomena Logica," and it is a great pity that he ever read that, because it was just that which introduced an element into his "First Principles" which philosophical students then and always regarded as utterly refuted and out of date, and which did not harmonize with his original work. When one thinks that his "Psychology" appeared in 1855, five years before Fechner's "Psychophysik," and simultaneously with Bain's first book, "The Senses and the Intellect"—so inferior in originality and value, although it taught us more, because we were better prepared for it—one cannot but rank Spencer very high. He wrote when the ideas of energy were in the air, especially among engineers, with whom he had mingled much. But those conceptions were by no means *répandues*, as they now are. That he had grasped them in his own way, we need not say. His valuation of Darwinism was from the first extraordinarily near to that of biologists of to-day. So it was with his estimate of the nebular hypothesis at a time when the objections to it appeared most redoubtable.

He did his work in his day, but the system of Synthetic Philosophy will never become a classic. It will not be read forever, like Locke's "Essay concerning Human Understanding," Berkeley's "Principles of Human Knowledge," and Hume's "Treatise of Human Nature." In a few years it will have passed into history, along with Cudworth and Occam—books that one wishes to know about, but to be excused from reading.

#### RECENT DRAMATIC VERSE.

In "The Sin of David" (Macmillan) Mr. Stephen Phillips has produced a play better calculated to "place" him critically than any of its predecessors. There is certainly nothing in it to furnish any occasion for those critical rhapsodies which, at the publication of "Paolo and Francesca," caused some momentary anxiety to admirers of Sophocles and Shakspeare. On the other hand, while the general tone is still of an elegiac wistfulness, rather than of true dramatic unction, "The Sin of David" is, essentially, less of a melodramatic spectacle, more of a tragedy, than either "Herod" or "Ulysses." The chief impression made by it is that it is the product of a moderate poetic faculty guided by an industrious and self-poised intelligence. Nothing could be cleverer than the scheme of setting the old Hebrew story of David, Uriah, and Bathsheba over into the very Israelitish times of the Puritan Commonwealth. David is represented by Sir Hubert Lisle, a commander in the Parliamentary army; Uriah by Col. Mardyke of the same army; Bathsheba by Miriam, his wife, who, for the sake of the poetry, is given a touch of Southern blood and a pretty vein of romantic fantasy. There is no addition to the scriptural story save in one respect; but structurally that one is important. It is in the first scene of the play, where we have Sir Hubert Lisle condemning to death Lieut. Joyce, one of his officers, for a wrong to a maid. The accused offers no defence save to say:

"Her face was close to me and dimmed the world." With fine tragic irony, Sir Hubert afterwards urges again and again the same extenuation for his own act.

It is needless here to follow the course of so familiar a fable, or to present any specimens of Mr. Phillips's habitual Tennysonian imagery and cadence. There is, however, one point in the play as its ethical knot is untied that calls for comment on the score of its general significance. In the view of any Puritan moralist, Sir Hubert Lisle has, like David, been guilty of the two tragic sins of murder and adultery. Yet at the end, when, five years after their marriage, Sir Hubert and Miriam are punished by the death of their child, the dramatist is content with this vicarious explanation, and leads us to hope that his married lovers, chastened by grief, will continue to live happily together. Read in the closet, this conclusion is moving and purging to the passions, leaving us in that situation, "durch Mitleid wissend," that is so agreeable to our modern mood. Yet on the stage, coming as it does after the execution of Lieut. Joyce for a less subtle but no more mortal sin, we fear that the effect of this conclusion will be that of a rather cynical morality. It is, of course, open to Mr. Phillips or to anyone to contend that this morality is less cynical than that of the source in Samuel, where we are told that David, after the absolving death of his love-child, "comforted Bathsheba, his wife, . . . and she bare a son, and he called his name Solomon, and the Lord loved him." Yet neither Sophocles nor Shakspeare, we think, to whom Mr. Phillips has been so often and so foolishly likened, would have let either the Psalmist or Sir Hubert Lisle off without the old tragic penalty—his death or the woman's. Even Haw-

P (1084)