

in Hades, like two characters in Lucian, possibly talking about this very book of Caird's, and vainly trying, with the tolerance suitable to disembodied spirits, to find out each what the other might be in the universe to do. They would hardly succeed so well as in this book Prof. Caird has succeeded for them. He has seen their close spiritual relationship, and has shown how much Comte's aim was like Hegel's. If in doing this he has rather delighted in reducing Comte to Hegel, than in trying to read Hegel in terms of Comte, the injustice, if it be such, is one natural to a disciple's nature, and also a necessary result of the fact that he has applied his criticism mainly to Comte's social philosophy. An equally thoughtful and tolerant Comtian critic, coming from his side with corresponding motives to the study of Hegel's *naturphilosophie*, would probably find no great difficulty in reducing whatever is significant in this part of Hegel to the terminology and to the thought of Comte.

But Prof. Caird is surely right in taking these two great thinkers to be expressions, unconsciously analogous, of the same great tendency. They both summed up the age of the reaction. In the temperaments of both smouldered the same repressed romantic fire, which each of them scorned in others, and could not destroy in himself. In each this same natural and suppressed sympathy with the romantic movement gave color to his results; each struggled with his temperament, and in each this struggle became his system. For philosophical systems, like all other products of devoted lives, are the results of inner personal conflicts of character. Hegel and Comte differed as Swabian from Frenchman; but their problems were much the same, and their results profoundly similar, beneath all the great external differences. Hence the concrete psychological interest of a book like the present.

There is no space here to go into the details of Prof. Caird's discussion. The book begins by pointing out the main elements both in the scientific and in the social philosophy of Comte. This part of the work is on the whole done very appreciatively. Then, in chapter ii., Prof. Caird begins his criticisms. Yet these criticisms are never merely destructive. The deeper sense of the doctrine is sought, and Prof. Caird easily finds, sometimes perhaps too easily, that where Comte was true to himself and to his problems, he was true also to essentially Hegelian principles. That Comte, for instance, in his hatred for what he called 'metaphysics,' stood in fact unconsciously on Kantian, and so on the Hegelian ground, is clear. That when Comte, after seeming to be a pure nominalist in his war with traditional relig-

ion and metaphysics, turns about and says: "Man is a mere abstraction, and there is nothing real but humanity," he comes upon decidedly Hegelian ground. "The defect," says Prof. Caird, "lies in the unconsciousness of his own metaphysic."

As chapter ii. is devoted to the negative or destructive side of Comte's doctrine, chapter iii. discusses the 'positive or constructive side,' including, in this, Comte's 'substitutes for metaphysic and theology.' Toward the end of the book, in chapter iv., on 'Comte's view of the relation of the intellect to the heart,' Prof. Caird seems to us to take his task too easily, and to content himself too frequently with inspiring but decidedly dark sayings. But here, very possibly, our failure to follow may be a matter of our own weakness in Prof. Caird's faith.

Prof. Caird's result assimilates very closely Comte's position in philosophy to that of Kant, namely, in so far as his thought was unconsciously, a germ out of which a positive idealism would have to grow if it were developed. "Also partly because he lived at a later time, and in the midst of a society which was in the throes of a social revolution, and partly because of the keenness and strength of his own social sympathies, he gives us a kind of insight into the diseases and wants of modern society, which we could not expect from Kant, and which throws new light upon the ethical speculations of Kant's idealistic successors." One has to believe, thinks Prof. Caird, that his system is 'inconsistent with itself' and that his historical and social theories are defective. But one finds him well worthy of study.

Let us add that one does not need to be an Hegelian in order to appreciate the skill and tolerance of Prof. Caird's book, and to find much that is deeply interesting, not only from a philosophic, but also from a purely psychological point of view, in this suggestion of strong mental and moral likeness under an external show of great diversity. In this sense, Prof. Caird has made a most helpful contribution to what we much need,—a psychological history of thought as a product of social and individual temperament.

RUSSIA UNDER THE TZARS.

READERS of 'Underground Russia' are familiar with the great fortress of Peter and Paul, famous as the place from which Krapotkin made his memorable escape, and they will recognize it here—not as an old friend—but as an old enemy. Not content, however, with a horrible description of the cruelties perpetrated in this place under the

Russia under the tzars. By STEPNIAK. Rendered into English by Wm. Westall. New York, Scribner's Sons, 1885. 12°.

sanction of the Czar's government, our author has shown us the interior of the other prisons to which political prisoners are sent, and has added a sketch of the life led by the suspects in exile. This occupies the middle of the volume, which opens with an account of the constitutional development of Russia—if it can be called development, when nearly all the movement has been backwards—and it is followed by a dry though useful description of the educational system of the country, written with a view to show its utter inadequacy. Stepniak, whose recent articles in the *London Times* on the present state of the Russian army are full of interest, possesses a talent for describing scenes of suffering and woe, which would have made his or her fortune if turned into the profitable channel of sensational novel-writing. But this same faculty prejudices his reader against him as the truthful narrator of scenes in actual life, and one puts the book down with a feeling that, after all, the author has been trifling with his sympathies.

JOHNSON'S SURVEYING.

THE method of ascertaining distances and elevations by means of the engineer's transit instrument and stadia—where the apparent length on a staff intercepted by two parallel wires in a telescope gives the distance of the staff from the instrument, and the vertical angle serves to determine the elevation—has not, as yet, become well established in private surveying practice, although no one who is well informed in such matters doubts its applicability to a large range of geodetic work, its accuracy and convenience.

The use of the stadia has been confined almost altogether to the U. S. and state surveys. The experience which Professor Johnson, of Washington university, St. Louis, gained while engaged on the surveys of the great lakes and the Mississippi River, has enabled him to prepare a very clear and concise manual of the operations of topographical surveying as there practised. He also gives a detailed description of the work of measuring a base-line and triangulating when the survey is of moderate magnitude, indeed for any work except the most important, and he explains the projection of maps for large and small areas.

The book is well suited to the class-room and the field. We should have preferred, however, to find his discussion of utility and universal applicability of the method placed in the introduction instead of the body of the text, or gathered

A manual of the theory and practice of topographical surveying by means of the transit and stadia; including secondary base-line and the triangulation measurements and the projection of maps. By J. B. JOHNSON, C. E. New York, Wiley, 1885.

into a note, for, when the reader is once assured of its reliability, he will be likely to feel that a manual is needlessly encumbered with such arguments.

NEW BOOKS.

*** For full titles see 'Publications received at editor's office.'*

'Aid to engineering solution' (Jackson) is intended to correspond with 'Aid to survey practice,' and to afford a succinct account of a simple general method of effecting engineering solutions, as well as to give a complete set of solutions useful to the engineer.—'Commercial organic analysis' (Allen) is the first volume of a revised edition, devoted chiefly to the consideration of bodies of the fatty series and of vegetable origin, and includes chapters on alcohols, ethers, and other neutral derivatives of the alcohols, sugars, starch and its isomers, and vegetable acids. The second volume is already on the press, and treats more especially of coal-tar products and bodies of the aromatic series, the fixed oils, and the products of their saponification; and the tannins will also be considered. It is proposed to devote a third volume to nitrogenized organic substances.—'Henfrey's English coins' (Keary) is a new edition of Henfrey's 'Guide to English coins,' with some corrections and enlargements, without any decided alterations in the form of the book.—'Silos for British fodder crops' (*The field*) is a third edition, the same as the last excepting that 48 pages have been appended to supply particulars respecting the ensilage competition of 1884.—'Mikroskopische reactionen' (Holtzendorff) is an attempt to bring together, for the use of chemists, reactions based on the crystalline form and optical qualities of substances, which can be used under the microscope.—'Spezial-karte von Africa' (Habenicht, Domann, and Lüddecke). This map, published by Justus Perthes in Gotha on the occasion of the centennial of the foundation of that house, is being made under the direction of Hermann Habenicht, Bruno Domann, and Dr. Richard Lüddecke. It will be published in ten parts on a scale of 1:4,000,000.

GEOGRAPHICAL NOTES.

CHAFFAUJON writes from Ciudad-Bolivar of his recent journey to the upper Orinoco and Cauca rivers. He was accompanied by Indian guides, two from the Arigua tribe, an Arebato and a Gagnungomo, the latter belonging to a tribe feared for its valor and ferocity by all the people of the region. The party passed without difficulty as far as a little village near the Brazilian frontier, where