waves from the latter cause were so greatly magnified beyond anything he had ever before observed that he thinks there can be no reasonable doubt of their reality as the result of the explosion. A second and still more violent commotion was observed 10 or 15 seconds later, and a third even greater disturbance occurred about the same length of time following the second. At 11:18:15 A. M., the entire surface of the mercury under the objective appeared to sway back and forth over a space certainly as great as one five hundredth of an inch. This action continued eight or ten seconds, and at the end of about 20 seconds there was almost an entire subsidence of the commotion. From this instant the recurring disturbances gradually diminished, and at 11:20 A. M. they had entirely ceased. At this time the ice wagon was directly opposite the observatory.

The waves of disturbance certainly increased in amplitude until 11:18:15 A. M., and gradually diminished after that time. The intervals between the waves appeared to be about 15 seconds, but attention was not withdrawn to the chronometer to be accurate as to this. Professor Rogers is not quite certain whether there were three or four waves preceding the one having the greatest amplitude. The direction of the waves as indicated by the movement of the spot reflected on the mercury surface, was certainly not due east and west, but rather about 15 degrees from the north and south line; that is, north of east and south of west. On the next following day, by prearrangement with the driver, an ice wagon was started from about opposite the observatory, to be driven rapidly away. Under these circumstances, only a very slight tremor of the mercury surface was visible, while the cart was traversing a distance of about 750 feet, after which the tremor ceased. The readings of the chronometer were corrected to give eastern time, as above stated.

SOCIAL PHILOSOPHY AND RELIGION OF COMTE.

THIS is one of the ablest works of the well-known author, and is a decidedly agreeable indication of the spirit just now prevalent in the better sort of philosophical discussion. When the British Hegelian movement began, a score of years ago, with Dr. Stirling's 'Secret of Hegel,' it was on its face an intolerant and exclusive movement. As popular English thought had no organ for understanding the master, and merely felt that Dr. Stirling had 'kept his secret,' so the Hegelian leader himself expressed a bitter contempt for popular English thought, and mutual advantage for the disputants seemed hopeless. The new Hegelianism looked like a new patent plan of salvation, with nothing to offer save to the faithful. Younger Hegelians in the British universities, equally learned in their chosen field, but less vain of their skill, have changed in latter days this forbidding exclusiveness. They have seen that a doctrine which pretends to be universal, cannot possibly be content with a merely scholastic intolerance and formalism. They have felt that if Hegelianism is of universal significance for human thought, it can be so only in case universal human thought is already in its actual essence, Hegelian, however unconscious the natural man may be of his discipleship. A system is of one sort when it says: "I express what you heretics shall become ere you shall escape from your natural and utterly lost state;" and of quite another sort when it says: "I express what you, as genuine human thinkers, already in your thought unwittingly are and aim to be." Now if there is any truth essential to genuine Hegelianism, it is that this latter attitude is the correct one towards the thought of any active and sincerely progressive age like the present. The Hegelian system pretends to have meaning only for an actual concrete world, and loses sense whenever it is presented as a remote plan of a purely abstract and ideal world. And so the healthy effort of the younger British Hegelians to drop Dr. Stirling's 'head-boy' airs, to cease boasting of the skill required for seeing through the Hegelian mill-stone, and to tell us a straight story about what human thought is and does, is an effort of a most gratifying sort. To be sure, this effort must not be confounded with any debased 'popularizing' of philosophical study, such as should overcome difficulties only by keeping them below the horizon. The more recent British Hegelian books and articles are not very easy reading. But they have a most stimulating air of actuality about them, and if Prof. Caird is not always so robust and direct in speech as some of his fellows, he at least shows a very sincere effort to continue his studious progress earthwards; and we may hope that he will ere long reach his goal.

This undertaking then, to show not that human thought must needs put on the Spanish boots of any man's terminology, but that the Hegelian doctrine has expressed profound truths about the unconscious spirit, and about the true meaning and work of all sound natural thought, is exemplified by Prof. Caird in the volume before us, by an application of his method to a criticism of Auguste Comte. Comte is, one would have supposed, at the other pole from Hegel. One would be amused to imagine them, in Walter Savage Landor fashion, engaged in conversation, or, better,

The social philosophy and religion of Comte. By EDWARD CAIRD, L.L.D. New York, *Macmillan*, 1885.

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 religion 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 Krapotkine 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°.