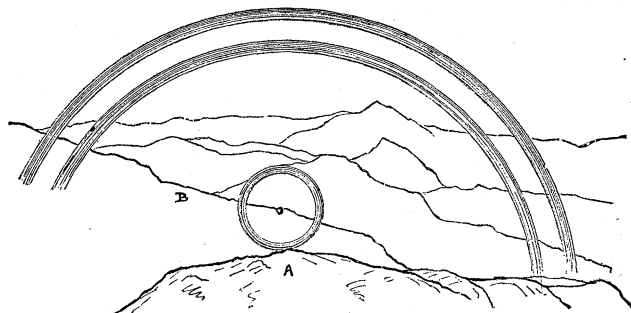


Triple Rainbow.

WITHIN a few months we have been twice favored with the following rainbow combination. In each case it occurred just before sunset. Two complete arcs rested on the mountains on one side, and descended into the valley of the Rimac on the other, while in the centre was a complete circle of smaller size. The point of observation (A) is 6,500 feet above sea-level. To the east are mountain-ranges rising to the Cordillera in the background. At the times of observation there were high clouds yielding a



gentle rain, by which undoubtedly the two ordinary arcs were caused. At the same time, however, a low, light cloud was drifting through the valley between A and B, and reaching nearly to the observer.

In this cloud the circle was formed. The indistinct shadow of the observer's head appeared at the centre (O), and the lower part of the circle was slightly obscured by the shadow of his body. The colors of the circle were not so brilliant as those of the arcs above. The circle also appeared less distant; but this apparent difference of distance was not so marked but that at first glance the three bows seemed to belong to the same system.

At a point an eighth of a mile nearer the sun, and hence farther from the cloud, only the two superior arcs were visible.

Mount Harvard, Peru, April 26.

SOLON I. BAILEY.

BOOK-REVIEWS.

Pictorial Africa, its Heroes, Missionaries and Martyrs. New York, Fleming H. Revell. 4°.

Henry M. Stanley. By ARTHUR MONTEFIORE. New York, Fleming H. Revell. 16°. 75 cents.

THESE two books, both of which are by English authors, are intended as popular accounts of African discovery. The first, which is anonymous, is to a considerable extent a compilation, and gives a summary of most of the noted discoveries in the Dark Continent during the past hundred years, from those of Bruce and Mungo Park down to recent times. Stanley's work is but lightly touched upon, while that of Livingstone is described at great length, the compiler of the book being much interested in Christian missions. The volume contains a good deal of information about the various regions of Africa, their inhabitants and products; yet, as we have said, the work is popular rather than scientific, and it has the defects as well as the merits that popular books are apt to have. It is illustrated with a large number of engravings.

The little volume on Stanley's explorations is an abler work, and, though intended for popular reading, gives, nevertheless, a very good account of the various expeditions that Stanley has made, and of their most important results. It opens with a brief history of his early life, which shows clearly that the experiences he went through in those days helped to train him in the habits of self-reliance and ready resource that were afterward to be so useful to him and to the world. His trips to Abyssinia, Persia, Coomassie, and elsewhere are briefly noticed, and then begins the story of his great discoveries on the Kongo and elsewhere, closing with his arrival at Zanzibar with Emin Pasha. Mr. Montefiore's narrative covers all the more important incidents of the various expeditions, with special regard to their geographical and political significance,

Publications received at Editor's Office,
May 26-June 7.

- DYNAMICS, Syllabus of Elementary. Part I. Linear Dynamics. Prepared by the Association for the Improvement of Geometrical Teaching. London and New York, Macmillan. 39 p. 8°. 30 cents.
- ELLIS, H. The Criminal. New York, Scribner & Welford. 337 p. 12°. \$1.25.
- FULLERTON, G. S. On Sameness and Identity. (Philosophical Series, No. 1.) Philadelphia, Univ. of Penn. 156 p. 8°.
- GOMME, G. L. The Village Community. New York, Scribner & Welford. 299 p. 12°. \$1.25.
- LANKESTER, E. R. The Advancement of Science. Occasional Essays and Addresses. London and New York, Macmillan. 387 p. 8°. \$3.
- MAINE, Fifth Annual Report of the State Board of the State of, for the Fiscal Year Ending Dec. 31, 1889. Augusta, State. 304 p. 8°.
- MINERAL Resources of Ontario, Report of the Royal Commission on the, and Measures for their Development. Toronto, Ont., Warwick & Sons, Pr. 566 p. 8°.
- RELIGIO-PHILOSOPHICAL Journal. Vol. 1. No. 1. w. Chicago, J. C. Bundy. 16 p. f°. \$2.50 per year.
- SESSIONS, F. C. In Western Levant. New York, Welch, Fracker Co. 252 p. 12°.
- THURSTON, R. H. Heat as a Form of Energy. Boston and New York, Houghton, Mifflin, & Co. 261 p. 12°. \$1.25.

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HEAVEN AND HELL. 416 p., paper. **DIVINE LOVE AND WISDOM.** 383 p., paper. By EMANUEL SWEDENBORG. Mailed, prepaid, for 14 cents each (or 25 cents for both), by the American Swedenborg P. and P. Society, 20 Cooper Union, N.Y. City.

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and conveys a good deal of information in a small compass. As a popular account of Stanley's work, it is worthy of commendation.

AMONG THE PUBLISHERS.

THE latest issues of the *Modern Science Essayist*, devoted to popular evolution essays and lectures, are as follows: No. 25, "Evolution of Arms and Armor," by John C. Kimball; No. 26, "Evolution of the Mechanic Arts," by James A. Skilton; and No. 27, "Evolution of the Wages System," by George Gunton.

—D. C. Heath & Co. will soon publish editions of three of Molière's comedies, — "Le Tartuffe," "Le Bourgeois Gentilhomme," and "Le Médecin Malgré Lui," edited by F. E. A. Gasc.

—Readers of "Robert Elsmere" will be interested to find in Dr. G. P. Fisher's "Nature and Method of Revelation," just issued by the Scribners, a chapter devoted to the discussion of the religious views of Matthew Arnold as advocated by Mrs. Humphry Ward in her novel.

—The interest in meteorology is on the increase in Russia, and by the end of this year or the beginning of next the Geographical Society proposes to start a monthly meteorological journal called *Meteorologičeski Wjestnik*. Friends of meteorology are requested to inform the society of their intention to subscribe to it. If a sufficient number of subscribers can be obtained, the journal will be started. It will pay great attention not only to bibliography, but also to reviews, and extracts from meteorological works in Russia and abroad, and to the applications of meteorology to agriculture, hygiene, etc.

—One of the popular writers in France to-day is M. Imbert de Saint Amand. During the past few years he has written a series of interesting biographical volumes relating to the famous women of the French Court, which have passed through numerous French editions, and are now being translated into English by Mr. T. S. Perry for the Scribners. The first two volumes, entitled "The Wife of the First Consul," and "The Happy Days of the Empress Marie Louise," have already been published. The next volume, "Marie Antoinette and the End of the Old Régime," will appear at an early date, and other volumes are in preparation.

—Mr. George E. Brett, who established the New York branch of Macmillan & Co. twenty years ago, and who successfully managed it until his retirement from duty on the 1st of this month, died at his residence in this city on Wednesday, June 11, of consumption. He had been ailing for several months, but his many friends had hoped that his well-earned rest would soon restore

him to health. The business of Macmillan & Co. in this city will hereafter be carried on by Mr. George P. Brett, who was appointed to the management on June 1, upon his father's retirement.

—Dr. Newman Smyth's new book, entitled "Personal Creeds," just published by the Scribners, aims to show men "how to form a working theory of life." It appeals to the class of individuals who, while unable to accept every thing they have been taught in religion, would not miss the best faiths implied in right living.

—Following in the line of the large English publishers who have opened agencies to the United States comes the announcement that the Religious Tract Society of London are also about to establish a depository in this country. Mr. Fleming H. Revell (New York and Chicago) has been appointed sole agent for the society, and will supply both the wholesale and retail trade from both points. The publications of the Religious Tract Society are by no means confined to "tracts." On the other hand, they are among the largest publishers in Great Britain of fine illustrated gift books, works of travel, science, healthy fiction, and popular juveniles, as well as most valuable theological and devotional volumes.

—The University of Pennsylvania has begun the publication of a series of monographs on philosophical themes, the first of which is entitled "On Sameness and Identity," by George S. Fullerton, professor of philosophy in the university. He begins by calling attention to the different senses of the word "same," and the confusion that often flows from not attending to the distinction between them. He then proceeds to distinguish what he believes to be seven different meanings of the word, explaining each of them at such length as seems to him necessary. Having thus set forth his own views, he devotes the rest of his work to a criticism of other thinkers for their ambiguous use of the term, dealing with various writers from Heraclitus to the present day. For our part, however, if we wanted examples of the confusion of thought resulting from a misuse of the word in question, or from want of attention to its different meanings, it is to the pages of Mr. Fullerton's work that we should go. For instance, there is no difference between the second and fourth cases of sameness that he enumerates, while in the seventh case there is no sameness at all. The grand defect of the book is that its author has no consistent theory of the *ego* and the external world. He denies that we have any immediate knowledge of these things, but whether the things themselves really exist or not is a point about which he does not seem to have made up his mind; and in consequence of this his discussion of sameness and identity is full of mistakes and inconsistencies.

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