neither contemptuous like Hegelianism nor degraded to a servile co-ordinator as in the positivism of Comte and Spencer, but is equal and friendly, bringing a new method of its own for the attainment of further truth. This intuitional method requires a great effort at the outset, he admits; for it involves a turning away from the intellectual methods of the last 2500 years. After reading this book of Mr. Carr's and the whole of M. Bergson's published writings, one reviewer at least feels that while M. Bergson is undoubtedly trying to express what is very real and true to him-and doing it in beautiful language-the thing is difficult and almost impossible, because the philosophy consists of an attitude, so to speak —or of a vividness of personal experience, which Mr. Carr denies that it is is incommunicable. mystical, and, taking some senses of that muchabused word, he is no doubt right; but it is mystical in its anti-conceptualism, and is essentially allied to various Oriental systems. It is a grafting of East on West, including the excellences of both. Perhaps at bottom it is a release from old fetters rather than a new doctrine. A heterodoxy does its chief good not by bringing new truth, but by cancelling out old error, and allowing the mind to go forward unencumbered. I. A. H.

## OUR BOOKSHELF.

Panama, the Canal, the Country, and the People. By Arthur Bullard (Albert Edwards). Revised edition. Pp. xiv+601. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1914.) Price 8s. 6d. net.

MR. BULLARD (Mr. Edwards of the first edition) has brought his sketch of Panama up-to-date by the addition of chapters describing the progress of the canal since 1911. The book consists chiefly of two parts, first a history of the State of Panama, and secondly a very pleasant description of the life of the Americans during the last ten years in the huge construction camp on the canal line. This life was well worth description, being truly a remarkable phenomenon. In the midst of a tropical wilderness, far from their own country, and in a pestilential climate, a labour-camp of fifty thousand hands settled at once to an orderly and civilised life, and, under the protection of a medical despotism, enjoyed on the whole excellent health.

Mr. Bullard provides character sketches of the principal constructors—Colonel Goethals, Colonel Sibert, Doctor Gorgas, and the rest, including Mr. Comber, the dredging expert, who is responsible, under Colonel Goethals, for most of the work now going on. This consists in the removal of the material which comes into the Culebra cut from the breaking ground along a length of about two miles near the deepest part of the excavation. Part of it slides in from

above, part of it squeezes up from below under pressure from the sides. It is this latter movement which is so disquieting. In one or two cases ships have gone aground before it was known that there had been an upheaval beneath the opaque and muddy waters of the canal. Some years may elapse before the Culebra cut is stable; meanwhile, the canal is used, though not without interruption, and the whole of the complicated lock machinery works without a hitch.

Catalogue of Scientific Papers. Fourth Series. (1884–1900.) Compiled by the Royal Society of London. Vol. xiv. C—Fittig. Pp. 1024. (Cambridge University Press, 1915.) Price 21. 10s. net.

The first volume of the fourth series of the Royal Society's Catalogue of Scientific Papers was noticed in the issue of Nature for August 20 last. It was pointed out on that occasion that this series comprises the titles of papers published or read during the period 1884–1900, and concludes the work undertaken by the Royal Society. The catalogue thus completed will contain titles of papers for the whole of the nineteenth century. It will be remembered that the continuation of the work is now undertaken by the authorities of the International Catalogue of Scientific Literature

The present volume contains 24,994 entries of titles of papers by 4351 authors with the initial C, 17,665 entries by 3072 authors with the initial D, 7750 entries by 1368 authors with the initial E, and 6646 entries by 1230 authors under F, as far as Fittig. The total for the first two volumes of the series is 108,775 entries by 18,950 authors.

It is to be hoped that the series of volumes will be added to every reference library of importance throughout the world, so that the public-spirited conduct of the publishers, who have undertaken the complete risk of printing and publishing, may not result in financial loss.

What do We Mean by Education? By Prof. J. Welton. Pp. xii+257. (London: Macmillan and Co., Ltd., 1915.) Price 5s. net.

Prof. Welton's question has been heard in every direction since the war began; and perhaps the outstanding characteristic of the answers which have been offered is the almost complete disagreement among them. Most competent persons will agree with Prof. Welton that "an investigation into fundamental principles" is necessary before a satisfactory reply to the question can be given. This book undertakes such an inquiry, and certainly the reader who follows the argument to the end will leave the volume with much clearer ideas on the subject. The titles of the chapters indicate the trend of the discussion: "The end rules the means"; "What should be the end?"; "Synthesis of liberty and authority"; "What are the means?"; "Who are the agents?" Though difficult reading in parts, the volume deserves the careful attention of teachers and educational administrators.