

as he states it, and his applications of it, are rather confusing. It would be difficult indeed to put D'Alembert's principle in words so that a student at the beginning of his study of mechanics could grasp its significance. Any attempt would be apt to confuse rather than help the student.

Space will not permit me to go into further detail. To be brief, he seems inclined to introduce new difficulties, and to cover up the old ones. The book is not free from loose reasoning.

E. W. RETTGER

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Conservation of Water. By WALTER McCULLOH, C. E. Addresses delivered in the Chester S. Lyman lecture series, 1912, before the senior class of the Sheffield Scientific School, Yale University. New Haven, Yale University Press; London, Humphrey Milford, Oxford University Press. Cloth, $6\frac{1}{2} \times 9\frac{1}{4}$ in. Pp. x + 99; 39 illustrations. \$2. Postage, 15 cents.

At a time when the question of our water resources and a national policy regarding them is becoming a matter of increasing importance this book is very opportune. The lectures printed therein cover the following topics:

The first chapter considers the desirability of proper handling of our water supplies and the questions of legal jurisdiction over them. Then follows a chapter on the economic, hydrographic, topographic and geologic data necessary for an intelligent handling of the problem in any case. The third chapter gives some very interesting information in regard to the water power of the United States, both developed and undeveloped, with some statistics that are hard to collect otherwise. The value of storage reservoirs in connection with power developments is shown. The next chapter treats of water supplies for municipalities and the problems of sanitation and drainage. The last chapter describes in detail the water resources of New York state and the present important developments.

This is not a book for a specialist, already

well informed in hydraulics, nor is it well adapted for use as a text-book for students. But for all readers who are interested in water resources and related problems it is a book that can be read with profit. It should be of especial value to the non-technical man who desires a broad understanding of the engineering principles involved.

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Stuttering and Lispings. By E. W. SCRIPTURE. New York, The Macmillan Co. 1912. Pp. xiv + 251.

After many years of clinical work and private practise in the treatment of speech defects, Dr. Scripture has here written down many of his observations regarding the causes, symptoms and treatment of stuttering and chronic mispronunciation. As a cause of stuttering a "general anxiety neurosis" is emphasized but the author avoids much elaboration of this topic.

In the chapter on symptoms some etiology is necessarily considered and many interesting kymograph records of respiration, vocal and articulatory movements are reproduced. The method of taking these records is well illustrated by photographs, and their significance is discussed in the text. The treatment outlined is perhaps the most valuable contribution in the book and is systematically referred to the preceding diagnosis. The exercises in voice modulation—a method of treatment largely original with the author—are carefully described. Psychanalysis and suggestion are dealt with briefly.

The second part of the book treats of lispings, as it is of negligent, organic or neurotic origin. The mouth positions for articulating the different vowel and consonant sounds are indicated by diagrams, "palatograms" and photographs. Some valuable methods for inducing the patient to attain the proper positions are given. At the end of the book are fifty pages of exercises to be used in the treatment of both stuttering and lispings.

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