

The Secretary of Commerce has, however, taken pains to show that the issue is by no means a non-partisan one. On October 13, 1913, Secretary Redfield appeared before the House Committee on Expenditures in the Department of Commerce and thus expressed himself regarding the law of 1912: "I shall be glad to cooperate in any way within my lawful power or within the scope of my personal ability in carrying out to the spirit and to the letter what I regard as very wise legislation for the protection of our fur-seal herd." He even went further and announced to the committee that he had discharged the chief of the Alaska division of the Bureau of Fisheries and the naturalist of the fur-seal herd, because, forsooth, their "mental attitude" toward this law was not right. In other words, because these men believed the law was a mistake, they were disciplined.

The new commission is therefore in a dilemma. It must find the law of 1912 to be right or else to be wrong. In the one case, in a single season's work and with opportunity to get first-hand information on vital matters cut off, it must either review and turn down the work of an eminent body of men acting on unlimited data, or else it must contradict the expressed belief of the very authority under which the commission acts.

Meanwhile there hangs over the commission and its work a most heavy forfeit. The law of 1912, in so far as it prohibits the killing of male seals, was adjudged unnecessary eighteen years ago; the increase of  $12\frac{1}{2}$  per cent. in the stock of breeding seals in 1913, the second season under exemption from pelagic sealing, fully bears out this decision. The Secretary of Commerce has in his possession to-day adequate data to warrant the immediate repeal of the law. Such repeal now would permit of the resumption of normal land sealing in 1914 and the taking of the half million dollars' worth of sealskins which the hauling grounds of the Pribilof Islands stand ready to yield. We lost a like sum in 1913 through the operation of the law. The delay necessary to let the new commission make its report will inevitably repeat this loss. In short, the report of the com-

mission will cost at a minimum \$500,000, fifteen per cent. of which belongs to Canada, fifteen per cent. to Japan, and seventy per cent. to the treasury of the United States, under the treaty of July 7, 1911.

GEORGE ARCHIBALD CLARK

#### THE PRESERVATION OF ANTHROPOID APES

TO THE EDITOR OF SCIENCE: The suggestion of Professor Robert Yerkes in SCIENCE of May 1, that permanent stations should be established in tropical countries for the preservation of anthropoid apes in order that observations of value from a psychological standpoint be obtained, prompts me to urge the same thing on another and more important ground. As readers of SCIENCE doubtless know, the question of the etiology and the treatment in a number of diseases which have hitherto baffled investigators, probably will depend upon the use of these apes as objects of experimentation, and for this, if for nothing else their extinction should be prevented.

H. GIFFORD

OMAHA, NEB.

#### SCIENTIFIC BOOKS

- Clean Water and How to Get It.* By ALLEN HAZEN. Second Edition. New York, John Wiley & Sons. 1914. Pp. 181. \$1.50.
- Studies in Water Supply.* By A. C. HOUSTON. New York, Macmillan Co., Limited. Pp. 193. \$1.60.

These two volumes may well be considered together, for they occupy the same general field, although their scope and method of treatment are quite different. Both authors are acknowledged experts in the subjects with which they deal.

Hazen's book is decidedly American in point of view and makes a strong case for the filtration of public water supplies as a means of protecting municipalities against typhoid and other forms of disease and for the improvement which can be so produced in the appearance, taste and odor of surface waters.

By some, the book will be regarded as too condensed to give a comprehensive knowledge of the many topics dealt with, but the

volume is not intended to be exhaustive. It is such a statement of the essential principles of American water purification practise as Mr. Hazen's large experience as a consulting engineer in this field has led him to believe would be useful to beginners. There is no better text-book for persons desiring a knowledge of water purification in the United States.

There are eighteen chapters in Mr. Hazen's book, including such topics as water supplies from rivers, lakes and wells; the history of water purification in the United States; storage of filtered water; use and measurement of water; suitable pressure to be supplied in water works systems; effect of iron pipes on water, and the layout of works. The subjects dealt with include sand filters, mechanical filters, coagulation basins and aeration.

The book is well-illustrated with half-tones and is produced with the usual excellence of the Wiley press. The first edition, published seven years ago, has been revised and expanded.

Houston, the bacteriologist and director of water examination of the Metropolitan Water Board of London, has produced a book in which he has explained his views as to the extent of the danger to be apprehended from polluted river water and how that danger is avoided without filtration by London, the largest and one of the healthiest cities in the world.

The American arguments which have been built up without opposition in the last twenty years and which seek to account for much of the excessive prevalence of typhoid in American cities as caused by polluted surface water are declared to be inconclusive and not in consonance with ascertainable facts.

Dr. Houston maintains that a watershed may be exposed to manifold pollution and the river draining from it impure, as judged by ordinary chemical and bacterial tests, but the water may nevertheless be shown to contain none, or scarcely any, of the microbes of water-borne diseases when tested by methods of proved value.

The American theory to the effect that the

incidence of tuberculosis, pneumonia and other diseases not otherwise suspected of being water-borne can be greatly reduced by improving a public water supply is incredible to Dr. Houston.

The book is actually, but not formally, divided into two parts: The first tends to free the River Thames and the River Lee, which supply London with 80 per cent. of its drinking water, from the full gravity of the charge of being sewage-polluted rivers, and the second presents evidence that the self-purification process employed by London to prepare the water for consumption is uniformly efficient. There are eleven short chapters. The topics include water and disease; the financial value of pure water; sterilization processes; storage in relation to purification; the question of abstraction; sources of water; bacterial methods and much information about the remarkable water supplies for London over whose quality the author has had official supervision for many years.

GEORGE A. SOPER

NEW YORK CITY

*Studies in Seeds and Fruits. An Investigation with the Balance.* H. B. GUPPY. London: Williams and Norgate. 1912. Pp. xii + 528.

A careful reading of the research work, detailed in this volume, has abundantly repaid the reviewer. Guppy commenced the investigation, as a study of the rest-period of seeds, using in his research merely a sharp knife, pocket lens, balance and oven. The first chapter details the history of the investigation. The second chapter describes the three conditions of the seed, viz., the soft pre-resting seed, the contrasted, hard-resting seed and the soft, swollen seed on the eve of germination. Observations by means of the balance are made on seeds in all three of these stages. The third chapter is concerned with the impermeability of seeds and its significance, the fifth is a classification of seeds according to their permeability, or impermeability, while the sixth chapter gives additional evidence. The whole book is full of tables and is loaded with