work it was bound in volumes, making a very handsome as well as valuable set.

OLIVE JONES,
Librarian

AN EXPERIMENT ON A FASTING MAN

THERE was completed at this laboratory on May 15 a successful 31-day experiment during complete inanition, the subject drinking 900 c.c. of distilled water per day. Elaborate measurements of the gross metabolism as indicated by the carbon dioxide production, oxygen consumption, water vaporized and heat elimination were made on each day. Continuous records of rectal temperature, pulse rate, respiration rate, ventilation of the lungs, blood pressure, microscopic blood examination, careful clinical examinations, anthropometric measurements and psychological tests were a part of each day's routine. Photographs of the subject at stated times and X-ray plates at the conclusion of the fast were secured. Complete urine analyses were also made throughout the 31 days. The mass of data will require several months for complete and verified computation.

Newspapers and magazines, actuated only by the sensational element, have used every means to secure advance statements, and in some instances have issued "faked" statements, regarding this experiment. The results will be presented only in the publications of the Carnegie Institution of Washington or in the regularly accredited scientific journals, and any prior statements purporting to be made by me or signed by the subject, A. Levanzin, are to be disregarded.

FRANCIS G. BENEDICT
NUTRITION LABORATORY OF THE
CARNEGIE INSTITUTION OF WASHINGTON,
BOSTON, MASS.,
May 15, 1912

SCIENTIFIC BOOKS

The Pines of Australia. By RICHARD BAKER and HENRY G. SMITH. Technical Education Series, No. 16. Sydney, 1910.

The present publication of the department of public instruction of the state of New South Wales is a memoir of over four hundred and fifty pages, copiously illustrated by means of photographs and photomicrographs and accompanied by two maps showing the distribution of the "Pines." Many of the illustrations represent more or less accurately the appearance of stained microscopic sections reproduced by the three-color process. It seems questionable even in a semi-popular work like the present to use the term "Pines" to represent the Conifers as a whole. Such an appellation is almost sure to lead to misconceptions on the part of the reader, particularly in the southern hemisphere, where true pines are conspicuous by their absence. The authors are at some disadvantage on account of the multifariousness of the task they have set themselves, for they aim to include in their account of these trees, their systematic relations, the history of the names given them, their morphology and anatomy, their useful products, including the chemistry of some of these and finally their geographical distribution. This appears to be too large a field to be covered successfully or fully, even by the collaboration of a chemist and a botanist.

Under the head of morphology and anatomy are recorded observations as to the significance of the "spur" of the cone scale of the genus *Callitris* and the probable function of the central columella in the cone of the same genus. It is noted that the chemical products, particularly the resinous ones of species which resemble one another morphologically are very strikingly similar. Attention is called to the presence of manganese compounds in the parenchymatous cells of the wood of *Callitris* and other genera. The manganese content in some cases is very considerable. The value and nature of the tannins and sandarac resins of *Callitris* are discussed and similar accounts are given of the gums, resins and oils of the other coniferous genera of the Australian flora.

The volume concludes with appendices on the systematic value of the chemical products of plants, on the distribution of Australian conifers, and on the collaborators, who have assisted in various ways in the preparation of the work. There are likewise several good