

will be disposed to watch with sympathetic interest the movement for a federation of scientific and technical workers; but until their plans are more fully known it will be premature to say that medicine should have any direct concern.—*British Medical Journal*.

### SCIENTIFIC BOOKS

*The Productivity of Invertebrate Fish Food on the Bottom of Oneida Lake, with Special Reference to Mollusks.* By FRANK COLLINS BAKER. Technical Publication No. 9, New York State College of Forestry at Syracuse University, Syracuse, N. Y. 1918. Pp. 233, Figs. 44.

This valuable contribution to the general subject of limnology is based upon a numerical study of the bottom fauna of a portion of Oneida Lake, New York, which was made during the month of July, 1916. Lower South Bay and two smaller areas, all at the southwestern corner of the lake, were covered in the survey; they constitute an area of 1,164 acres, or a little less than two square miles out of a total lake surface of about 80 square miles. The maximum depth of the water in the area under consideration is about 19 feet as compared with a maximum of 55 feet for the entire lake.

In the area covered by this survey the greatest development of plant and animal life was found in the zone extending from the shoreline out to the six-foot contour line. Numerically, about 88 per cent. of the invertebrate animals were obtained in this area. The second zone lay between the six-foot and the twelve-foot contour lines and the population of this belt was very much smaller than in the first zone. A still further decline in the density of the population was noted between the twelve-foot and the eighteen-foot contour lines, which constituted the third zone.

Various types of bottom were found in the area studied, ranging from boulders to clay and mud. Of those represented, the sand bottom was richest in animal life while the boulder bottom was poorest.

A classification of the animals on the basis

of their feeding habits showed that herbivorous and detritus feeders greatly predominated over the carnivorous forms; the latter, in fact, constituted only 0.29 per cent. of the total population. Of the various groups of animals represented, the mollusks yielded a much larger number of individuals than any other group; they even exceeded in numbers all of the associated animals combined.

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### SPECIAL ARTICLES

#### THE ANTISCORBUTIC PROPERTY OF DEHYDRATED MEAT

THE present conception of a perfect diet demands that the intake contain adequate proteins, sufficient fats, carbohydrates, inorganic salts, bulk, and the three vitamins designated as water-soluble B, fat-soluble A, and antiscorbatic. For some time we have used to produce experimental scurvy in guinea-pigs a combination which meets all of these requirements except that of the antiscorbatic vitamin. A mixture of soy bean flour, whole milk, dried yeast, paper pulp, sodium chloride and calcium lactate is dried down into a cake.<sup>1</sup> This is fed as the basal ration supplemented with a definite amount of the product whose antiscorbatic potency it is desired to determine. By this procedure we have demonstrated that dried cabbage,<sup>1</sup> dehydrated tomatoes<sup>2</sup> and desiccated orange juice<sup>3</sup> retain some of their original content of antiscorbatic vitamin.

The indications are that each foodstuff ought to be studied individually. Meat being one of the most staple articles of our dietaries it has therefore seemed highly important to determine if it retains any antiscorbatic potency after drying.

Stefansson<sup>4</sup> states that "the strongest anti-

<sup>1</sup> Givens, M. H., and Cohen, B., *J. Biol. Chem.*, 1918, 36, 127.

<sup>2</sup> Givens, M. H., and McClugage, H. B., *J. Biol. Chem.*, 1918, 37, 253.

<sup>3</sup> Givens, M. H., and McClugage, H. B., *Am. J. Dis. Child.*, 1919, 18, 30.

<sup>4</sup> Stefansson, V., *J. A. M. A.*, 1918, 71, 1715.