priations for the establishment of experiment stations, laboratories and the prosecution of many forms of scientific investigation, and nowhere can he get this information so effectively as through biological The scientific ideas and ideals studies. upon which such measures are based if once drilled into the student by concrete example and experiment will inevitably affect his conduct through all his future life. Public encouragement, or at least public tolerance, must exist before we can travel far in the application of biological principles to the welfare of the community or of the na-M. F. GUYER tion.

University of Wisconsin

## SCIENTIFIC EVENTS THE LAKE LABORATORY OF THE OHIO STATE UNIVERSITY

For the session of 1918 the Lake Laboratory will be located at Put-in-Bay, which is a beautiful harbor on South Bass Island in Lake Erie. This island lies about five miles off the south shore of Lake Erie and twenty miles north of Sandusky, Ohio. It is only a few hours by lake steamer from Cleveland, Toledo and Detroit. South Bass Island is one of the group of three Bass Islands, the others being Middle Bass and North Bass. Nearby are Green Island, Rattlesnake Island and several other smaller islands. This situation offers an excellent location for a Great Lakes biological station. Lake Erie is probably the richest in flora and fauna of any of the Great Lakes. The islands offer a varied environment of rocky shore, sandy beach and woodland. On the mainland, within easy reach, are extensive sand dunes, large marshes, woodlands and streams.

The laboratory will have quarters in the building of the fish hatchery operated by the state of Ohio. The second floor of this building furnishes ample room for lecture and table space. On the ground floor there are large aquaria and several tiers of hatching jars supplied with running water. The lab-

oratory owns a small gasoline launch and rowboats. In addition to this the boats and field equipment of the Fish Hatchery will be available. There is a large boat which will enable workers to visit any part of Lake Erie.

If the change for this year from the former location at Cedar Point to Put-in-Bay proves to be advantageous it is hoped that eventually close relationships can be established with the fish cultural activities in Ohio. The state authorities are giving their hearty cooperation. The staff for the coming session will comprise Dr. F. H. Krecker, Ohio State University, Acting Director, who will give a course in ecology of aquatic animals; Dr. S. R. Williams, of Miami University, who will offer a course in the morphology of fresh-water invertebrates; Professor M. E. Stickney, of Denison University, who will have charge of the work in botany, and Professor Z. P. Metcalf, of North Carolina Agricultural College, who will give a course in entomology. Professor Herbert Osborn, research professor of Ohio State University, and Dr. R. C. Osburn, head of department zoology and entomology at Ohio State University, will be in attendance for parts of the session.

While the courses mentioned above are given for the benefit of those who may need them, the research activities of the laboratory are to be emphasized. Persons who may desire to engage in independent investigation of biological problems will be cordially welcomed. No fees will be charged such individuals unless for special equipment or materials supplied.

Comfortable living accommodations will be afforded in a furnished cottage adjoining the Fish Hatchery. Board will be given at cost.

The acting director, Dr. F. H. Krecker, will be glad to give any information desired. He should be addressed until June 15 at Ohio State University, Columbus, Ohio, after that time at Put-in-Bay, Ohio.

## ANTI-TYPHOID INOCULATION

Dr. W. W. Keen has addressed the following letter to the Secretary of War:

In a four-page pamphlet entitled "Why Is My Soldier Sick," issued by the National Anti-vivisec-

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tion Federation, with headquarters at 456 Fourth Avenue, New York City, are published two resolutions passed by the New York Anti-vivisection Society at its annual meeting January 31, 1918, and forwarded to you officially. The second resolution reads as follows:

Be it further resolved, That a copy of the foregoing resolution be forwarded to the Secretary of War as our official protest against the medical department's claim that serum inoculation is a necessary war measure and for that reason made compulsory, and as our protest against compulsory inoculation when the individual soldier conscientiously objects thereto; and we point to the provision of exemption now made by Great Britain, that power having been forced to rescind the rule of compulsion after the alarming effects of inoculation were disclosed.

It has long been a matter of common knowledge and deeply regretted by the medical profession that Great Britain has never made anti-typhoid vaccination compulsory, as it fortunately is in our own army.

In an article entitled "The Red Cross and the Anti-vivisectionists," a copy of which I am inclosing, I have shown by irrefutable facts how extraordinary the protection of the anti-typhoid vaccination has been in our own army and in the British army.

Although I knew that the statement in this resolution was an absolute falsehood, I preferred to have an authority which was beyond all question. Accordingly, on Saturday, April 27, I sent the following cable to Surgeon-General Goodwin, who occupies the same post in Great Britain that General Gorgas does in this country:

SURGEON-GENERAL GOODWIN, War Office, London. Has anti-typhoid vaccination ever been compulsory in British army?

KEEN

To this on Monday, April 29, I have received the following reply:

London, Professor Keen, Philadelphia.

Anti-typhoid inoculation has never been compulsory in British army.

Goodwin

You will observe, therefore, that this is a flat countradiction of the false assertion of the New York Anti-vivisection Society.

Nearly all of the British army has been voluntarily vaccinated against typhoid fever. Colonel F. F. Russell, in Surgeon-General Gorgas' office, authorizes me to say that he understands that ninety-nine per cent. of the British soldiers are vaccinated against typhoid fever. The reason for this is that they have seen how extraordinarily complete is the protection offered by the anti-

typhoid inoculation. At this time the fate of the war depends largely on the health of our army. It is in my opinion equivalent to disloyalty to deprive our soldiers of this protection and sacrifice their lives instead of the lives of a few rabbits, guinea pigs, cats and dogs.

Yours very respectfully,

W. W. KEEN

## THE SILLIMAN LECTURES

The Silliman Lectures at Yale University, to be delivered from May 21 to 29, will be based on seven of the twelve chapters contained in the anniversary number of the American Journal of Science, to be published about July 1. A Silliman lectureship volume, embracing the contents of this number, with some additions, will also be issued later by the Yale University Press. The lectures will be as follows:

I. The American Journal of Science from 1818 to 1918, by E. S. Dana. May 21, 4 P.M.

II. A Century of Geology—Historical Geology, by Charles Schuchert. May 22, 4 P.M.

III. A Century of Geology—The Growth of Knowledge of Earth Structure, by Joseph Barrell. May 23, 4 p.m.

IV. The Development of Vertebrate Paleontology, by Richard S. Lull. May 24, 8 P.M.

V. The Progress of Chemistry during the Past One Hundred Years, by Horace L. Wells. May 27, 4 P.M.

VI. A Century's Progress in Physics, by Leigh Page. May 28, 4 P.M.

VII. A Century of Zoology in America, by Wesley R. Coe. May 29, 4 P.M.

## THE BALTIMORE MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE annual meeting of the American Association for the Advancement of Science and of the national scientific societies affiliated with it will be held at Baltimore, from December 27 to December 31. Boston had been selected as the place of meeting this year, action recommending that the meeting be held in that city having been taken at the meeting in New York City two years ago. In view, however, of war conditions and of the large number of scientific men now working at