

ings, each 0.8 cm. diameter. The solid lead plug serves to keep the room sound-proof if it is not necessary to conduct the sound from without; the second and third give opportunity of introducing one or two sound stimuli, respectively.

The room is fitted with electric light and wires for telephone and other electrical purposes.

The location of the window, on the southern side of the room, makes it possible to have the room lighted by the sun and a thorough ventilation may be secured in the intervals of a series of experiments. One thing has not been solved in the construction, viz., the ventilation of the room during a series of tests. The room is large enough to hold one person for, say, a half hour without discomfort from lack of oxygen, and the use of porous material in the construction may make it possible to remain a longer time without ill effect.<sup>2</sup> For a series of tests on tones a half hour is sufficient time if we do not have to deal with a condition of the ear analogous to the adaptation of the eye. If time is needed for the "adaptation" of the ear perhaps some further scheme of ventilation may be required. On this point, the adaptation of the ear, we have no information and one of the possibilities of the room is the discovery of such adaptation.

When in the room, some, not all, persons experience peculiar sensations from the ear (drum?), corresponding to the sensations in slightly compressed air. There is a distinct feeling of pressure which is subjective and which disappears so soon as a sound is made, or sound stimuli are given.

The noiselessness of the room is shown by the fact that one hears a subjective buzzing, similar to but of less intensity than the buzzing produced by large doses of quinine. Many normal people can also hear their own heart sounds. It is true that their own heart sounds can be heard by some in rooms not noiseless, but this is not the case with many normal individuals except after very violent exercise. In the room a few swings of the

leg or arm is often sufficient to make the heart sounds quite distinct. Other body noises may also be heard. If a movement of a few inches in extent is made, such as lightly brushing the foot over the carpet or a free movement of the arm, the sound is distinctly audible. So audible are these noises that one must be careful not to move when experiments are in progress. A further proof of the noiselessness of the room is to be found in the fact that a shell held to the ear does not appear to give forth any sound. The tones for which the shell is resonant are absent. It should be mentioned again here that the felt-like lining of the room effectually stops all sound reflection. Whatever sounds are produced or brought into the room are in this respect simple; they cease when the vibration reaches the wall.

To keep the room fresh and clean, in addition to the entrance of sunlight and fresh air, dust and other dirt are removed by a mechanical cleaner—the so-called compressed air cleaner—and it is disinfected by formalin vapor.

In experiments during the past three or four years the room has been used in its various conditions of evolution and in its final form has proved to be most satisfactory. For many years it will doubtless be a standard for the construction of similar rooms in other institutions.

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GEORGE WASHINGTON UNIVERSITY

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#### SEVENTH INTERNATIONAL ZOOLOGICAL CONGRESS—SECTION OF PALEOZOOLOGY

For the first time in the history of the International Zoological Congress, a section of paleozoology was organized and met during the Boston convention of the congress, August 19–24. Early in the year a circular announcing the formation of this section was sent to paleontologists of this and other countries from the office of the organization chairman, Professor H. F. Osborn.<sup>1</sup> This circular called attention to the unusual opportunity afforded

<sup>1</sup> Owing to Professor Osborn's absence in Egypt, many omissions in the sending of this circular occurred.

<sup>2</sup> On this point I failed to make inquiries.

by the congress for seeing the great paleontological collections of the Eastern United States and to the further opportunity which the meeting of American with European paleontologists would afford for the discussion of some of the broader problems of the science. The response to the invitation was a gratifying one; such a goodly number of paleontologists attended the congress, and so much was the need of such a periodic gathering of the workers in this science felt, that the permanency of the section is assured. These meetings will be looked forward to as the opportunity for establishing closer personal relations with fellow paleontologists of distant lands and for a discussion of those questions of our science which are of more than local interest.

The meetings of the section were scheduled for Tuesday and Wednesday mornings, August 20 and 21, from 10 A.M. to 1 P.M., but it was found necessary to hold additional sessions on Thursday and Friday mornings. The first meeting was called to order by the organization chairman, Professor H. F. Osborn. Professor Charles Depéret, of the University of Lyons, France, was elected first chairman of the section, and Professor A. W. Grabau, of Columbia University, New York, secretary. Professor Gustav Steinmann, of the University of Bonn, was elected chairman for the sessions of Thursday and Friday.

The principal address of the meeting was delivered by Professor C. Depéret, on Wednesday morning. It was given in French, the title being "Les migrations des faunes tertiaires entre l'Europe et l'Amérique." Two other addresses on the broader aspects of the science were made, one by Professor Gustav Steinmann in German, on "Die Bedeutung der Paläontologie für die Abstammungslehre," on Wednesday, and the other on Friday, by Professor H. F. Osborn, on "Evolution as it appears to the Paleontologist."

The complete list of papers presented before the section and the order of their presentation was as follows:

*Tuesday, August 20.*

Professor A. GAUDRY: "Patagonie et Antarctique." (Read by Professor H. F. Osborn and since published in SCIENCE.)

Professor W. B. SCOTT, Princeton University: "The Zoogeographical Relations of the Miocene Mammals of Patagonia."

Dr. W. J. SINCLAIR, Princeton University: "The Santa Cruz Typotheria."

Professor H. F. OSBORN, American Museum of Natural History: "Zoogeographical Relations of Northern Africa in the Upper Eocene."

*Wednesday, August 21.*

Address by Professor CHARLES DEPÉRET, University of Lyons, France: "Les migrations des faunes tertiaires entre l'Europe et l'Amérique."

Professor GUSTAV STEINMANN, University of Bonn, Germany: "Die Bedeutung der Paläontologie für die Abstammungslehre."

Dr. W. J. HOLLAND, Carnegie Museum, Pittsburgh: "A Preliminary Account of the Pleistocene Fauna discovered in a Cave opened at Frankstown, Pennsylvania, in April and May, 1907."

Professor T. D. A. COCKERELL, University of Colorado: "The Miocene Fauna of Florissant, Colorado."

Mr. O. A. PETERSON, Carnegie Museum: "Preliminary Notes on some American Chalicotheres."

Professor A. W. GRABAU and Miss MARGARET REED, Columbia University: "Mutations of *Spirifer mucronatus*."

*Thursday, August 22.*

Dr. P. E. RAYMOND, Carnegie Museum: "The Clymenia Fauna in the American Devonian."

Professor C. DEPÉRET, University of Lyons, France: "Sur un nouveau genre 'Lophiaspis'."

Mr. C. H. STERNBERG: "*Hesperornis regalis*, the Royal Bird of the West."

Dr. F. W. TRUE, U. S. National Museum: "On the Correlation of North American and European Genera of Fossil Cetaceans."

*Friday, August 23.*

Professor H. F. OSBORN, American Museum of Natural History: "Evolution as it appears to the Paleontologist." (Since printed in full in SCIENCE.)

Professor A. W. GRABAU, Columbia University: "Value of the Protoconch and Early Conch Stages in the Classification of Gastropoda."

Professor R. S. LULL, Yale University: "The Evolution of the Ceratopsia."

Dr. E. DOUGLASS, Carnegie Museum: "The Oligocene Fauna of Montana, with Sections of the White River Beds at White Bed, Montana, and the Little Badlands in North Dakota." (By title.)

Professor R. T. JACKSON, Harvard University: "Studies of Fossil Limulus." (By title.)

DR. C. R. EASTMAN, Museum of Comparative Zoology: "Cranial Structure of Dipterus and Related Genera." (By title.)

Dr. O. P. HAY, American Museum of Natural History: "Fossil Turtles of North America." (By title.)

Professor H. F. OSBORN, American Museum of Natural History: "A Means of Estimating the Age of the Mastodon and other Proboscidea." (By title.)

At the Friday session a resolution was adopted, that it was the sense of the section of paleozoology, that the time was ripe for the organization of a Society of American Paleontologists, to include vertebrate and invertebrate paleozoology and paleobotany. A committee was appointed, with Professor H. F. Osborn as chairman, to confer with the officers of the Society of Vertebrate Paleontologists with a view to disbanding that society, or merging it with the larger body, and to correspond with all teachers of, and workers in, paleontology in North America, with the view to the formation of the new society.

Before the final adjournment of the section on Friday, Professor Osborn, in behalf of the local committee, and of the American members of the section, expressed great pleasure in being able to welcome the distinguished foreign paleontologists present, and assured them that American paleontologists greatly appreciated their efforts towards making this meeting such a success. Professor Steinmann, in reply, expressed the appreciation on the part of the foreign delegates, of the welcome given them, and further expressed the hope that this meeting might be the first of many others for the benefit of all concerned.

A. W. GRABAU, *Secretary of the Section*

**THE AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS. SECTION K—PHYSIOLOGY AND EXPERIMENTAL MEDICINE—AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. BIOLOGICAL SECTION OF THE AMERICAN CHEMICAL SOCIETY**

*Preliminary announcement pertaining to the Chicago meetings, December 30 to January 2*

FOUR sessions of the Biochemical Society, three sessions of Section K, of the American

Association for the Advancement of Science, and one session of the Biological Section of the American Chemical Society will be held during convocation week. The provisional schedule of the meetings of these three organizations is appended.

*Monday, December 30*

1:30 P.M.—Meeting of the Council of the American Society of Biological Chemists.

2:30 P.M.—Business session of the American Society of Biological Chemists, followed by reading of papers.

*Tuesday, December 31*

9:30 A.M.—Joint session of the American Physiological Society and the American Society of Biological Chemists.

2:30 P.M.—Vice-presidential address by Simon Flexner, retiring chairman of Section K of the American Association for the Advancement of Science. Subject: "Recent advances and present tendencies in pathology," followed by a joint session of the American Physiological Society and Section K of the American Association for the Advancement of Science.

(No meeting of the Biochemical Society on Tuesday afternoon.)

*Wednesday, January 1*

9:30 A.M.—General session of the American Chemical Society in affiliation with Section C (Chemistry) of the American Association for the Advancement of Science, including (at about 9:45) the address of the president of the American Society of Biological Chemists and chairman of the Biological Section of the American Chemical Society, Russell H. Chittenden, on the subject: "Some of the Present-day Problems of Biological Chemistry," followed by a joint meeting of the Biological Section of the American Chemical Society and the American Society of Biological Chemists.

1:00 P.M.—Meeting of the Sectional Committee of Section K.

2:00 P.M.—Symposium on Immunity, under the auspices of Section K of the American Association for the Advancement of Science, with the following program:

Introductory remarks by the chairman, Ludvig Hektoen.

M. J. Rosenau and John F. Anderson: "Anaphylaxis and its Relation to Immunity."