later stages the leaves may crinkle and brown irregular spots are distributed over the leaf surface.

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EVIDENCES OF AQUATIC LIFE FROM THE GLENWOOD STAGE OF LAKE CHICAGO

RECORDS of aquatic life during the various stages of Lake Chicago have been lacking for the earliest or Glenwood stage, whose waters stood about fifty-five feet above the present level of Lake Michigan. F. C. Baker points out that the withdrawal or Bowmanville stage of the lake, immediately following the Glenwood, witnessed abundant life in the waters of Wilmette Bay.[1] In the latter part of November, 1928, the junior author discovered minute molluscan shells in the well-stratified silts and clays of the Glenwood stage of Lake Chicago. Later, additional species were collected from the same locality, by D. F. Higgins and the senior author.

The locality where the discovery was made is in the western part of the village of Wilmette, Illinois, in the $SE\frac{1}{4}$ of the $SE\frac{1}{4}$ of Sec. 29, T. 42 N., R. 13 E., Cook County. The area lies in the fields north of Lake Avenue and east of Reinwald Avenue, Wilmette. A master's thesis, written by Miss Marie Devou, of Northwestern University, presents a further description of this region. The surface of the fields is between 625 and 630 feet A. T., or about fifty feet above the level of Lake Michigan. The shells were found about four feet below the surface in that part of the lake plain that was covered by the waters of Skokie Bay during the Glenwood stage of Lake Chicago.

The sediments were screened and washed, and a few more specimens have been found. These were sent to Mr. Baker, who kindly identified them and who lists the following species:

Gyraulus circumstriatus walkeri (Vanatta)
Gyraulus umbilicatellus (Ckll.)
Menetus exacuous (Say)
Helisoma trivolvis (Say)
Stagnicola caperata (Say)
Stagnicola reflexa (Say)
Physa gyrina hildrethiana Lea
Sphaerium occidentale Prime
Strobilops virgo (Pilsbry)[2]
Planorbula n. sp.

The last named is a species soon to be described by Mr. Baker. All the species, with one exception, are fresh-water shells. Mr. Baker states that these species are known in the older deposits of middle Illinois. Doubtless they migrated to the vicinity of the Glenwood beach, where, as Mr. Baker points out, they occupied the warmer waters of the shallow pools behind the beach barriers.[3]

The specimens identified by Mr. Baker have been placed in the Pleistocene collections at the University of Illinois Museum of Natural History. They will become a part of the Chicago Pleistocene collection.

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THE CAPTURE OF YOUNG WHITEFISH IN THE BAY OF QUINTE

THE young of the common whitefish (*Coregonus clupeaformis* [Mitchill]) have been taken but rarely in scientific collections, and, so far as the writer has been able to ascertain, the only reference to current year fry in the literature is that of Hankinson (1914). The capture of a considerable number of young whitefish in the Bay of Quinte is therefore of interest. These fry were taken close to shore in water of a depth of three feet or less on numerous occasions between April 12 and June 4, 1928. The capture and observation of these fry over a period of some seven weeks provide material which yields valuable information on the early growth, food and habits of this important commercial species. Full details of the early life history of the whitefish will be published at an early date.

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SCIENTIFIC BOOKS

Comparative Neurology, A Manual and Text for the Study of the Nervous System of Vertebrates. By JAMES W. PAPEZ. Thomas Y. Crowell Company, 1929. xxi + 518 pp., 315 figs. 8vo.

THE author has undertaken the difficult task of producing a combined laboratory guide and text-book on the anatomy of the nervous system. The comparative point of view is introduced in the first chapter with a discussion of the cerebral cortex of some of the lower mammals in relation to their sense-organ equipment. In the following chapters an account of gyri and sulci of the cortex in some of the

[1] F. C. Baker, "The Life of the Pleistocene or Glacial Epoch, as Recorded in the Deposits Laid down by the Great Ice Sheets," Univ. of Illinois Bull., XVII, 41, 1920, pp. 71–73.

[2] A land shell.

[3] F. C. Baker, personal communication.

larger mammals is given, and this is followed by a consideration of the lobes of the cerebrum in several mammalian groups. Part I of the book, which part deals with the gross structures of the mammalian brain, is concluded with several chapters on the brain-stem, cerebellum and spinal cord. The student will gain much from a careful study of this section, which is chiefly descriptive. The investigator will look in vain for many references to the literature, which he may consider should have been included in this and in the other two parts of the book, but the author states in the preface that no attempt has been made to include a complete bibliography.

Part II deals with the microscopic structure of the mammalian nervous system. A series of sections through the brain-stem of the cat is illustrated from original figures. One could wish that the reference letters were more easy to find. The text is descriptive, with occasional paragraphs of interpretation in terms of function. In the chapter on the sympathetic nervous system which is included in this section this system is defined as "the name given to the visceral branches of the cranial and spinal nerves, with the exception of the vagus and glossopharyngeal." Confusion is added to an already chaotic nomenclature by subdividing the system into a "somatic division" and a "visceral or splanchnic division." The somatic division is defined as supplying "the sweat glands, blood vessels and erector pilorum muscles of the skin and blood vessels of striated muscles, body wall and limbs." The splanchnic division the author defines as supplying "the smooth muscles, glands and vessels of the viscera." Many neurologists will not agree with much of the discussion on cerebral localization. The account of the brain-stem, nuclei and fiber tracts is on the whole illuminating and suggestive. Having in mind the student, the author is somewhat dogmatic at times, and omits reference to important contributions in this and in other sections of the book. Within the scope of a single volume, covering so large a field, not every point of view can be expected to appear. A chapter on the physiology of the cerebral cortex gives some of the clinical disturbances met with in man, with some interpretation, and also a summary of studies on conditioned reflexes in animals.

Part III of the book discusses the brains of lower vertebrates, beginning with the reptiles, and ending with a chapter on the evolution of the forebrain. In this section of the book are introduced, briefly, in the chapters on the nervous system in amphibians and fishes, the doctrines of nerve components and functional columns of the central nervous system. Much that appears to the reviewer of fundamental importance to an understanding of the vertebrate brain is treated too briefly.

The volume is attractively got up. The type and paper are good, but typographical errors are rather numerous. Many titles in the bibliographies appended to the individual chapters are given in abbreviated words.

The numerous and well-executed figures of gross and of microscopic structures greatly enhance the value of the book.

O. LARSELL

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REPORTS

THE COMMITTEE ON AWARDS FOR THE SCIENTIFIC EXHIBIT OF THE AMERICAN MEDICAL ASSOCIATION

THE Committee on Awards reports:

CLASS I

[Awards in Class I are made for exhibits of individual investigations which are judged on basis of originality and excellence of presentation.]

The gold medal to EUGENE P. PENDERGRASS and TEMPLE FAY, Hospital of the University of Pennsylvania, Philadelphia, Pa., for the originality and thoroughness of their contribution to encephalography and the excellence of the presentation.

The silver medal to FRANK W. HARTMAN, Henry Ford Hospital, Detroit, Michigan, for original experimental work on the physiology and pathology of the kidney and for excellence of presentation.

The bronze medal to HOWARD D. HASKINS and EDWIN E. OSGOOD, University of Oregon Medical School, Portland, Oregon, for their contributions to hematologic methods.

The bronze medal to N. W. JONES, B. I. PHILLIPS and OLOF LARSELL, University of Oregon Medical School, Portland, Oregon, for their original experimental work on the treatment of anemia with nuclear extractives.

Certificates of Merit, Class I, were awarded to the following (alphabetically arranged):

B. T. HORTON and G. E. BROWN, Mayo Clinic, Rochester, Minnesota, for clinical physiologic and pathologic studies of diseases affecting the blood-vessels of the extremities.

CLAY RAY MURRAU, Columbia University, New York, for an exhibit of gross and microscopic demonstrations illustrating bone trauma and repair.

CHARLES SHEARD and A. H. SANFORD, Mayo Clinic, Rochester, Minnesota, for demonstration of a new photo-