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

MEDICAL SCHOOL,
UNIVERSITY OF OREGON

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-

electric method of determining the percentage of hemoglobin in the blood.

In addition, the following excellent exhibits are deemed worthy of special mention:

That of EBEN J. CAREY, Marquette University School of Medicine, Milwaukee, Wisconsin, illustrating a continuation of the experimental studies of bone growth, for which he received the silver medal in Class I last year.

That of ARTHUR W. ERSKINE, Cedar Rapids, Iowa, on Roentgen therapy technic.

That of C. H. THIENES and A. J. HOCKETT, on the effect of post-pituitary extract on the absorption of drugs from the gastro-intestinal tract.

CLASS II

[Awards in Class II are made for exhibits which do not exemplify purely experimental studies, and which are judged on basis of the excellence of correlating facts and excellence of presentation.]

The gold medal to PHILEMON E. TRUESDALE, Fall River, Massachusetts, for experimental demonstration of the mechanism of transposition of abdominal viscera following rupture of the diaphragm.

The silver medal to A. V. HARDY, University of Iowa, State Hygienic Laboratories, Iowa City, Iowa, for exhibit of various aspects of undulant fever.

The bronze medal to W. T. CUMMINS, Southern Pacific General Hospital, San Francisco; JOSEPH K. SMITH, Kern General Hospital, Bakersfield, California, and C. H. HALLIDAY, Baltimore, Maryland, for exhibit of various aspects of coccidioidal granuloma.

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

RICHARD B. CATTELL and SHIELDS WARREN, Lahey Clinic, Boston, for an exhibit of the pathology of the thyroid gland.

J. J. ELLER and N. P. ANDERSON, New York, for exhibit on cancer supervention in skin diseases.

J. EARL ELSE, University of Oregon Medical School, Portland, Oregon, for an exhibit of a study of goiter.

C. C. MCCOY, H. J. GERSTENBERGER, L. P. HARSH and D. G. SHIELDS, Babies' and Children's Hospital, Cleveland, Ohio, for an exhibit of the study of bone disorders in childhood.

JOHN OLIVER MCREYNOLDS, St. Paul's Hospital, Dallas, Texas, for an exhibit of the structure of the crystalline lens system in man and the lower animals.

In addition, the following exhibits are deemed worthy of special mention:

That of C. G. SUTHERLAND, Mayo Clinic, Rochester, Minnesota, showing Roentgenograms of bone lesions.

That of GEORGE W. SWIFT, Neuro-Surgical Clinic, Seattle, Washington, illustrating choked disk.

EDUCATIONAL EXHIBITS

A special Certificate of Merit is awarded to the U. S. Pharmacopeial Convention for the best exhibit in the educational (national organizations) classification. Mention is also made of the excellent exhibit of the U. S. Department of Commerce, Bureau of Mines.

COMMENTS

The committee commends the Special Cooperative Exhibit on Fractures, and desires to thank the members of the committee in charge and also the representatives of the U. S. Army Medical Corps for supplying facilities and for carrying out the demonstrations. The committee commends the exhibit on morbid anatomy, excellently demonstrated by the members of the Committee on Fresh Pathology, which has become an established feature. The committee commends the special demonstration of the biochemical diagnostic methods and desires to express its appreciation of the excellent work of the personnel in charge of the demonstrations.

The committee is impressed by the cooperation of the four sections sponsoring exhibits among their members, and also of the educational and governmental exhibits. It desires especially to commend the exhibits of syphilis of the eye presented by the members of the Section on Ophthalmology.

The committee commends the excellent arrangement of the scientific exhibit, especially the methods used for indicating the nature of the exhibits, the new type of set-up, and the thoroughly adequate illumination, as well as the many and excellent personal demonstrations. The spirit of cooperation on the part of the exhibitors in aiding the management deserves especial recognition.

C. R. BARDEEN, Madison, Wisconsin, *Chairman*
G. C. LANE, Boston
WILLIAM OPHULS, San Francisco
W. W. WASSON, Denver
O. H. WANGENSTEEN, Minneapolis
G. B. WEBB, Colorado Springs

SCIENTIFIC APPARATUS AND LABORATORY METHODS

A METHOD FOR OBTAINING A BREEDING STOCK OF RATS FREE FROM INTESTINAL PROTOZOA[1]

IN planning cross-infection or host-parasite relations studies one of the most serious difficulties encountered is the lack of experimental animals that are parasite-free. As a rule laboratory rats are infected with several species of intestinal protozoa, although different colonies of rats may differ as to

[1] From the department of protozoology, Johns Hopkins University School of Hygiene and Public Health. This work was aided by a grant from the committee on scientific research of the American Medical Association.