the following: (a) To receive from the advisory committee on education by radio its files and collected documents, to keep this material up to date and available for reference by the many students of the subject; (b) to organize some of the material into bulletins to be issued as demand warrants; (c) to outline techniques for research and carry on investigations into the best methods of broadcasting and compare the results of lessons sent to schools by radio with the results obtained by other means; (d) to keep the educational interests of the country fully posted on and alive to the importance of this new instrument as an educational tool; (e) to attempt to prevent conflicts and duplication of effort between various broadcasting interests; (f) to furnish advice on the educational soundness of programs suggested and to supply typical programs upon the request of any station whether educational or commercial.

2. That the funds necessary for financing such a section in the Office of Education be provided in the regular budget for the Department of the Interior.

3. That there be set up in connection with this unit an advisory committee representing educational institutions of commercial broadcasters and the general public. This committee should consist of 9 to 15 persons whose residence is such that they can meet from time to time for actual consideration of problems arising in the Office of Education. This committee may well administer any funds remaining in our budget to promote research into the techniques of radio education.

4. That an effort be made to secure from interested persons or foundations an amount of money sufficient to bring to the microphone, for a period of two to three years, a high grade program in certain formal school subjects and to check carefully the results obtained. The committee believes that as much as \$200,000 per year for a period of three years may be wisely expended in this manner, under direction of a non-partisan committee of educators and laymen.

5. That the secretary bring to the attention of the Federal Radio Commission the importance of the educational interests in broadcasting, and that he keep the President of the United States informed of the desirability of having on this commission spokesmen for programs which will tend to improve the general well-being of the American people.

## APPROPRIATIONS FOR GRANTS-IN-AID BY THE NATIONAL RESEARCH COUNCIL

AT its meeting in October the National Research Council's Committee on Grants-in-Aid made the following eleven awards:

Arthur A. Bless, associate professor of physics, University of Florida, for a study of diffraction of X-rays by polar molecules subjected to high steady and alternating fields; Perley A. Ross, professor of physics, Stanford University, for study of the width, intensity and structure of the modified line in the Compton effect.

E. M. Kindle, chief, division of paleontology, Geological Survey of Canada, Department of Mines, Ottawa, for a study of criteria for the correlation of Devonian formations; Chester K. Wentworth, associate professor of geology, Washington University, for comparison of glaciated and river-worn cobble stones.

L. R. Cerecedo, assistant professor of biochemistry, University of California at Berkeley, for investigations on the purine fraction of the nucleic acid molecule; Harry J. Deuel, Jr., professor of biochemistry, University of Southern California Medical School, for a study of the relative antiketogenic value of various carbohydrates; Ernest W. Goodpasture, professor of pathology, Vanderbilt University Medical School, for investigations on the etiology of *Granuloma inguinale*; Reginald D. Manwell, assistant professor of zoology, Syracuse University, for a study of avian malaria.

F. E. Chidester, professor of zoology, West Virginia University, for studies on the endocrines of nutrition; James B. Lackey, professor of biology, Southwestern College, for a study of the effects of variation in environmental factors and in cytological technique upon selected types of cells.

Roland C. Travis, associate professor of psychology, Western Reserve University, for investigation of the speed and characteristics of reflex and voluntary eye movements as indicators of the adequacy of adaptive behavior in children and adults.

## SCIENTIFIC NOTES AND NEWS

DR. ROBERT GORDON SPROUL was installed as president of the University of California on October 22, filling the vacancy caused by the retirement of Dr. W. W. Campbell. In connection with the ceremonies the doctorate of laws was conferred on Dr. Thomas Hunt Morgan, director of the Kerckhoff Laboratories of the Biological Sciences of the California Institute of Technology, president of the National Academy of Sciences and of the American Association for the Advancement of Science; on Dr. Arnold Bennett Hall, president of the University of Oregon; on Dr. Albert Russell Mann, dean of the College of Agriculture, Cornell University, and on Charles Derleth, Jr., dean of the College of Civil Engineering of the University of California.

THE John Fritz gold medal, regarded as the highest honor of the engineering profession in America, has been awarded for 1931 to Rear Admiral David Watson Taylor, retired, "for outstanding achievement in marine architecture, for revolutionary results of persistent research in hull design, for improvement in many types of warships and for distinguished service