supply, has been assigned to serve with the War Minerals Relief Commission as its chief engineer. J. W. Furness, who has been working with the war minerals supply division of the Bureau of Mines, has been given a permanent appointment in that division.

These changes and appointments are effective as of March 1, 1923.

## GRANTS FROM THE ELIZABETH THOMP-SON SCIENCE FUND

THE following awards were made at the meeting of the trustees of the Elizabeth Thompson Science Fund on February 24:

No. 241. To Dr. E. Wiedemann, Physikalisches Institut, Universität, Erlangen, Germany, \$100 for researches on physical properties of colloidal substances.

No. 242. To Dr. B. Lipschütz, Paltauf's Pathological Institute, Vienna, Austria, \$150 for studies of the experimental tar cancer of the mouse.

No. 243. To Mr. A. H. Palmer, U. S. Weather Bureau, San Francisco, California, for maps and photographs.

No. 244. To Dr. E. F. Adolph, Zoological Laboratory, University of Pittsburgh, Pittsburgh, Pa., \$250 for electrical equipment.

No. 245. To Dr. Frank A. Hartman, Physiology Laboratory, University of Buffalo, Buffalo, New York, \$200 for studies of adrenal function.

No. 246. To Professor James B. Conant, department of chemistry, Harvard University, Cambridge 38, Mass., \$150 for a study of a new method of comparing the reactivities of a series of organic chlorides.

No. 247. To Professor C. T. Brues, Bussey Institution, Harvard University, Forest Hills, Boston, Mass., \$100 for a study of certain phytophagic races of insects.

No. 248. To Professor G. H. Parker, Museum of Comparative Zoology, Harvard University, Cambridge, Mass., \$200 for the study of nerve respiration.

The Elizabeth Thompson Science Fund is administered by G. H. Parker, president; E. B. Wilson, secretary; Charles S. Rackemann, treasurer, and G. P. Baxter and W. B. Cannon, members of the board of trustees. The trustees meet three times a year toward the end of February, of May and of November. Applications should be in the hands of the secretary well in advance of the date of the meeting.

## GIFT TO THE ROYAL SOCIETY

SIR ALFRED YARROW, an engineer and shipbuilder of Glasgow, has given £100,000 to the Royal Society for reasons and under the conditions stated in the following letter, addressed to the president:

I would ask you to be so kind as to bring before the council, at an early opportunity, the following proposals:

I have, for many years, held the view that the prosperity of this country has been greatly hampered in the past for the want of better promotion to scientific investigation and its application to practical affairs.

I am convinced that the future prosperity of this country will be largely dependent upon the encouragement of original scientific research. The birth of new industries, and the development of existing ones, are due largely to the growth of science, thus securing employment and the welfare of the whole community being advanced.

It is doubtful whether even yet it has been realized how completely this country would have been at the mercy of our antagonists in the late war, had it not been for the research work done by our scientific men before the war and during its course.

I desire to mark my sense of the value of research to the community by offering, as a gift to the Royal Society, £100,000 to be used as capital or income for the purposes of the society, as the council may think fit, because I recognize conditions alter so materially from time to time that, in order to secure the greatest possible benefit from such a fund, it must be administered with unfettered discretion by the best people from time to time available.

Care must, of course, be taken that a gift from the fund shall in no case lessen any government grant.

In accordance with your practice you would, I assume, appoint a committee to administer the fund, and would also frame rules for the guidance of the committee, while reserving the right to alter such rules from time to time; and I would suggest that they be considered by the council every tenth year so as to meet modern needs.

I should prefer that the money be used to aid scientific workers by adequate payment, and by the supply of apparatus or other facilities, rather than to erect costly buildings, because large sums of money are sometimes spent on buildings without adequate endowment, and the investigators are embarrassed by financial anxieties.

Although I thus give a general expression of my wishes, I do not intend, by so doing, to create any trust or legal obligation for their fulfilment. In conclusion, I should like to record my firm conviction that a patriotic citizen can not give

money, or leave it at his death, to better advantage than towards the development of science, upon which the industrial success of the country so largely depends.

## THE ENDOWMENT OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY

MR. ARTHUR H. FLEMING, of Pasadena, for many years president of the board of trustees of the California Institute of Technology and its chief financial supporter, has recently given to the institute his fortune of \$4,200,000 as a permanent endowment fund. This gift, with Mr. Fleming's previous donations to the institute, make a total of over \$5,000,000. In the trust agreement entered into upon the turning over of this fund, Mr. Fleming has made the following statement of his own ideals for the institute:

The donor is convinced that the institute can best serve the purposes of its existence if its trustees adhere to certain fixed policies and principles, and he therefore earnestly advises and recommends:

That the institute limit its enrollment to not more than two thousand (2,000) students;

That it continue the work it is now doing in the several branches of engineering;

That it specialize in research in chemistry and physics, under the direction of the most competent men obtainable, with the most liberal provision, in the way of salaries and equipment, for the prosecution of such work;

That it seek and invite the superior student;

That it help and encourage those who are disposed to research, but that the utmost care be exercised in the manner of giving such help and encouragement, keeping always in mind that illadvised or too free-handed assistance begets weakness rather than strength, and that a man should be helped to help himself;

That it use every proper effort to obtain generous endowment funds, to the end that it may be able to make adequate provision for the effective prosecution of research work, pay good salaries to its faculty and obtain the services of educators of the first order; and, lastly,

That it keep its standards of the highest.

The donor is also convinced that the institute should always remain a privately endowed institution.

## SCIENTIFIC NOTES AND NEWS

THE executive committee of the American Association for the Advancement of Science recently elected the following vice-presidents of the association for the year 1923, these elections not having been made at the recent Boston meeting: For section L, Dr. Florian Cajori, professor of the history of mathematics, University of California. For section N, Dr. Richard P. Strong, chief, department of tropical medicine, Harvard University Medical School. For section Q, Dr. Henry W. Holmes, dean of graduate school of education, Harvard University.

PROFESSOR LEON J. COLE, of the University of Wisconsin, has been appointed chief of the division of animal husbandry of the U. S. Department of Agriculture.

THE Boylston medical prize of \$300, offered every other year by the Harvard Medical School in public competition for the best essay on a subject in medical science, has been won by Professor A. N. Richards and Dr. Joseph T. Wearn, both of the University of Pennsylvania.

THE University of Pennsylvania conferred the degree of LL.D. on Dr. Chevalier Jackson, professor of bronchoscopy and esophagoscopy in the graduate school of medicine of the university, at the ninety-eighth annual observance of Washington's birthday on February 22.

A DINNER in honor of Dr. G. Edmund de Schweinitz, Philadelphia, president of the American Medical Association, was given by the Chicago Ophthalmological Society on March 6.

DR. SWALE VINCENT, professor of physiology in the University of London, has been elected a member of the Paris Academy of Sciences in place of the late Professor Laveran.

THE Weldon memorial prize, which was founded at the University of Oxford in 1907 by friends of the late Professor Weldon, to perpetuate his memory and to encourage biometric science, has been awarded to Dr. Johannes Schmidt, director of the Carlsberg Laboratory, Copenhagen.

PROFESSOR BORDET, of Brussels, director of the Pasteur Institute of Brabant, has been