income could therefore be properly applied to a graduate fellowship or scholarship, the purchase of apparatus, of books and periodicals or for any other purpose which at the time and occasion give promise of advancing knowledge.<sup>1</sup>

The first installment of income becomes available at the beginning of the second half century of the university (1918-19).

On Wednesday evening. January 10, 1917, the members of the physics seminary and a few friends dined together at the University Club in Ithaca, on which occasion the establishment of the new research fund was celebrated. In expressing to the donors the appreciation of the department of physics Professor Nichols said:

The value of a gift like this, the income of which from year to year is placed freely at the disposal of those who are responsible for the promotion within the university of one of the fundamental sciences, to be expended in whatever manner from time to time may be most advantageous to the furtherance of research, is inestimable. It comes, moreover, at a time peculiarly opportune; when public opinion is aroused to some realization of the importance of research to human welfare. The history of science and industry teaches clearly that applied science upon which the material welfare of the race so greatly depends, advances only with the growth of pure science and that the university affords the most favorable, indeed, almost the exclusive, atmosphere in which research flourishes. Hence the demand, now beginning to be heard, not so much from within academic circles as from outside, that the universities of this country make the advancement of learning their prime function. Every such gift as this furthers that great end.

Modest though it be, in comparison with what men of great wealth may do for science without the least personal denial, this fund is especially welcome in that it comes from men of science and is given in a spirit of devotion to science and of real self sacrifice.

It is a notable and gratifying evidence of the unity of the scientific spirit that this fund for the promotion of physics is established in memory of one whose life was given to biology and who attained eminence by her contributions to that sister science; and that one of the donors who is with us to night, and whom we delight to honor, is himself a biologist of renown.

<sup>1</sup> Quotation from the deed of gift.

On behalf of my present colleagues of the department of physics I accept this gift. We shall endeavor to expend the income from it in the spirit in which it is given and in loving recognition of the generosity and devotion of the donors. In generations to come, we may rest assured, the noble intent of the donors will ever influence those intrusted with its administration and that thus it will ever be used for the true advancement of science.

## THE AMERICAN INSTITUTE OF MINING ENGINEERS

THE program of the one hundred and fourteenth meeting of the American Institute of Mining Engineers, which convenes in New York City on February 19, has been issued. Sessions will include the annual business meeting and presentation of papers on subjects of scientific interest in the mining field. In addition, a number of special social features are being planned, including an all-day excursion by special train to West Point, where the engineers will view a number of exhibitions and inspect the grounds of the Military Academy. According to registrations received, this year's prosperity of the mining camps in the middle and far west will be reflected in the attendance at the February meeting. Individuals connected with practically all of these will take some part in the technical sessions.

The meeting will extend over four days, and will open on February 19, with sessions on geology, metallography, petroleum and gas, and milling and smelting. On the following day, sessions will be held on iron blast furnace practise on flotation. The principal sessions of the third day will be held on the manufacture of iron and steel.

Among the papers which will be presented are:

"Recent Geologic Developments on the Mesabi Iron Range, Minn.," by J. F. Wolff.

"Grain Growth Phenomena in Metals," by Henry M. Howe and Ray Jeffries.

"Evidence of the Oklahoma Oil Fields on the Anticlinal Theory," by Dorsey Hager.

"Magnetic Concentration of Low-Grade Magnetic Iron Ore," by S. Norton.

"The Conservation of Phosphate Rock in the United States," by W. C. Phalen.

"Potash as a By-product from the Blast Furnace," by R. J. Wysor.

"Significance of Manganese in American Steel Metallurgy," by F. H. Willcox.

The committee on arrangements for the convention includes: David H. Browne, chairman; Lawrence Addicks, P. E. Barbour, George D. Barron, Karl Eilers, Louis D. Huntoon, H. A. Megraw, Thomas T. Read, Burr A. Robinson, F. T. Rubidge, E. Maltby Shipp, Bradley Stoughton, Edward B. Sturgis and Arthur L. Walker.

## APPROPRIATIONS FOR THE DEPARTMENT OF AGRICULTURE

THE House Bill making appropriations to the U. S. Department of Agriculture for the fiscal year ending June 30, 1918, is now under discussion. The main bill carries a total appropriation for routine and ordinary work of \$24,221,081. To this great amount are added other sums bringing the total amount carried in the bill to \$25,694,685. The amounts appropriated to the scientific bureaus are as follows:

Weather Bureau	\$1,778,320
Bureau of Animal Industry	3,528,286
Bureau of Plant Industry	2,769,630
Forest Service	5,711,195
Bureau of Chemistry	1,212,311
Bureau of Soils	363,855
Bureau of Entomology	911,980
Bureau of Biological Survey	589,510
Office of Public Roads and Rural Engi-	
neering	702,100

## SCIENTIFIC NOTES AND NEWS

SIR WILLIAM CROOKES, the distinguished English chemist; Dr. C. A. Angot, director of the French Bureau of Meteorology, and Professor August Gärtner, professor of hygiene, University of Jena, have been elected foreign members of the Academy of Sciences of Sweden.

THE Elisha Kent Kane medal of the Geographical Society of Philadelphia was, on January 19, conferred on Dr. William Curtis Farabee. Dr. Farabee gave before the society an illustrated lecture on "Exploration in the Amazon Valley and in the Unknown Guinea, 1913 to 1916." Dr. Farabee has also had conferred upon him the gold medal of the Explorers' Club of New York.

PROFESSOR E. F. NORTHRUP, research physicist of Princeton University, has been awarded the Elliott Cresson medal by the Franklin Institute "in recognition of his electrical inventions and high temperature investigations."

PROFESSOR WILBUR M. WILSON, of the department of civil engineering at the University of Illinois, was honored by the Western Society of Engineers at its annual meeting on January 10, by having conferred upon him the Octave Chanute medal, in recognition of the fact that a paper presented by him in 1915 was judged to be the best in the field of civil engineering presented before the society during that year. The medal was established in memory of Dr. Octave Chanute, whose studies in the field of aerodynamics were notable.

BRIGADIER GENERAL JOSEPH E. KUHN has been appointed president of the War College.

E. D. BALL, formerly director of the Utah Station, has been made state entomologist of Wisconsin, vice J. G. Saunders resigned to succeed H. A. Surface as economic zoologist of Pennsylvania.

PROFESSOR WERNER has been appointed director of the Heidelberg Institute for the Investigation of Cancer established by the late Professor Czerny.

AFTER twenty years' service in the New York Department of Health, Dr. John S. Billings, now deputy commissioner of health and director of the bureau of preventable diseases, has offered his resignation, to take effect on May 1.

EARL B. SMITH, formerly with the U. S. Office of Public Roads and Rural Engineering has been transferred to the U. S. Bureau of Soils as mechanical engineer. His work will be on engineering lines in the design and construction of the new government potash plant at Summerland, California, where he, with Dr. Turrentine, of the Department of Agriculture, will investigate the commercial possibilities of extracting potash, iodine, tar