able to investigators who desire to utilize it. A revised edition is in preparation for issuance in 1924.

The Committee on Grants of the American Association for the Advancement of Science earnestly invites the attention of investigators to the fact that the Association distributes annually from four to five thousand dollars in small grants, usually of less than $500. The Committee often has too few applications for aid. It never has had too many good ones! This undoubtedly is the experience also of similar bodies. Whether or not available funds for small grants are entirely adequate, it is reasonably certain that existing funds are not being used to the best possible advantage because investigators do not take the trouble to get their needs before the administrators of appropriate sources.

In so far as possible the Research Information Service of the National Research Council will advise inquirers about possible and appropriate sources of support and will thus enable them to communicate directly with special committees or other bodies.

ROBERT M. YERKES,
Chairman

COMMITTEE ON GRANTS OF
THE AMERICAN ASSOCIATION

JACOB ROSENBLOOM

ON September 25, 1923, there died in Pittsburgh Dr. Jacob Rosenbloom, the eminent metabolist. In him America lost an ardent lover of science, and biochemistry a prominent contributor to its progress.

I met Dr. Rosenbloom thirteen years ago when he was twenty-five years old. At that time he was a living dynamo, working fifteen to eighteen hours daily in the laboratory on several problems in biochemical research simultaneously. His mind was one of the alertest that I have known. He constantly read the scientific literature published all over the world, and, with the most tenacious memory, retained and indexed his gleanings so that he could throw light at any moment on any problem in the very diverse fields of medicine and biochemistry.

His tastes were catholic. His reading was as diverse as literature itself. He spent very little time in the enjoyment of the trivialities of life. His laboratory and his library were his places of recreation and repose.

Dr. Rosenbloom was born in Braddock, Pennsylvania, on February 25, 1884. He received elementary and high school education in the local schools and then entered the University of Western Pennsylvania, from which he was graduated in the year 1905 with the degree of Bachelor of Science. His professor at the university was Dr. Francis Phillips, a man who has left his mark on American chemistry. Professor Phillips prophesied a brilliant future for Dr. Rosenbloom's chemical attainments, and he remained his friend and admirer until his own demise. From Columbia, Dr. Rosenbloom received the degrees of Doctor of Medicine and Doctor of Philosophy. Later on he was appointed biochemist in the Western Pennsylvania Hospital of Pittsburgh and assistant professor of biological chemistry in the University of Pittsburgh.

His specialty in medicine was the diseases of metabolism, and he was the first man in the United States to recognize such a specialty, to enter it and to find many imitators.

Dr. Rosenbloom was generous to a fault. His time, his purse and his labors were always at the command of his friends. One can conceive of the generosity of his mind when one is told that knowing that his time for research was limited, he published at his own expense a brochure entitled "1000 problems in biochemical research" and freely distributed it to his friends and enemies for them to grasp these suggestions and to work out these original thoughts of his.

He has contributed more than one hundred reports of original research to the various medical and biological journals of America, England and Germany. Those who have read his works will feel greatly the loss that science sustains.

Towards the later years of his young life, Dr. Rosenbloom devoted much time to the history of medicine and he had made several interesting contributions to that subject in the *Annals of Medicine* and in *Medical Life*. He has asked the author of these lines before he died, not knowing that he was going to die, to collaborate with him in the publication of a volume on "Critical Studies in the History of Medicine." This volume is ready and will soon be submitted for publication.

MAX KAHN

NEW YORK, N. Y.

SCIENTIFIC EVENTS

BRITISH AGRICULTURAL RESEARCH[1]

ROBERT HUTCHINSON, president of the National Association of British and Irish Millers, read a paper on "The Economic Basis of Wheat-growing in England" at the annual meeting of the fellows of the National Institute of Agricultural Botany on November 2. The only way, he said, of preventing the area under wheat from being further reduced was to raise the price to a profitable level. This is not impossible if a wheat is obtainable which combines with the productivity, the stiffness of straw and the resistance to disease of the best English wheats, the "strength" which puts so high a premium on the best Canadian wheats. "Strength" is the mysterious factor which

[1] From *Nature*.

determines the size, shape and palatability of a loaf. For many years it was believed that a strong wheat could not be grown on English soils or in the moist English climate. Wheats imported for experimental purposes from Canada, Russia, Hungary and Turkey all lost their quality within a few years. But one wheat, Canadian Red Fife, has been proved to retain its strength unimpaired after 21 successive years' growth in England. Professor R. H. Biffen, working on Mendelian lines, has proved that strength is a dominant characteristic, and by crossing Red Fife with high-yielding English wheats has already given the farmer Yeoman wheat, which without admixture of foreign wheats will yield satisfactory bread. But, in Professor Biffen's own words, the sooner Yeoman is off the market the better, for a series of new wheats believed to combine the best characteristics of Canadian and English varieties, and adapted to different types of soils, are now growing at the Cambridge Plant Breeding Institute, and it is hoped to market the first of these through the National Institute of Agricultural Botany in the autumn of 1924. If the promise of these wheats materializes, English wheat will be lifted from the category of kinds to be bought for breadmaking only when the price is low into the category of kinds desired and essential. This change would revolutionize the financial prospects of English wheat-growing.

Of recent years the great development of agricultural education and research in Great Britain has attracted considerable attention throughout the empire. The number of research workers spending some time at centers such as the Rothamsted Experimental Station is rapidly increasing. In the majority of cases they are sent officially by the dominion government concerned. A further example of this cooperation is furnished by the recent departure of Sir John Russell, director of the Rothamsted Experimental Station, on a special mission to the Sudan. He will be associated with Dr. H. Martin Leake, director of agriculture for the United Provinces of India, in advising the Sudan Government on its agricultural policy. In view of the enormous possibilities for growing cotton in the Sudan, agricultural research work will be mainly concerned with cotton. The first instalment of the great irrigation scheme in the Gezira plain south of Khartoum is expected to come into operation in the autumn of 1925. At this stage 300,000 acres will be put under irrigation, of which 100,000 acres will be under cotton; but the total scheme is capable of development over an area of 3,000,000 acres. In approaching Sir John Russell and Dr. Leake, the Sudan government has been actuated by the desire to get the best possible advice as to the organization and direction of the agricultural research work which should be undertaken in connection with this project, which may ultimately produce 1,000,000 bales of cotton a year. It is hoped that the Empire Cotton Growing Corporation will cooperate with the Sudan government in the research work to be carried out, and that this work can be coordinated with a general plan for research work on cotton problems to be organized throughout the British Empire.

BRITISH EXPEDITION TO SAMOA

THE research expedition arranged by the London School of Tropical Medicine, which is going out to Samoa to study the prevention of filariasis and associated diseases, especially elephantiasis, according to the London *Times*, has left Southampton in the *Athenic* for New Zealand, *via* Panama.

It consists of Dr. P. A. Buxton, the well-known zoologist, entomologist and medical man; Mrs. Buxton and Mr. G. W. Hopkins, of Downing College, Cambridge. In New Zealand, they hope to add to their company one or two New Zealand medical students, who will thereby be given opportunity of studying some of the problems of disease which the government of their dominion will have to face in connection with its mandate over such areas as Samoa.

It is hoped to be able to demonstrate that the infecting of man (animals are never infected) by the mosquito "carrier" of the filaria can be prevented by clearing away all the undergrowth round the masses of coconut palms, destroying the broken shells, thrown on one side in making the copra, which harbor water, and by destroying the rhinoceros beetle, which bores into the tree holes that retain moisture in which the mosquito breeds. The natives meanwhile will be carefully supplied with water from uncontaminated cisterns.

Elephantiasis is largely responsible for the apathy and lack of initiative on the part of the Polynesian, making necessary the introduction of Chinese and Indian labor for developing many natural resources. Filariasis also has a very serious effect on the birth rate. So far no drug is known which will destroy without killing the patient the hair-like worm (the males are 1½ inches long and the females 3 inches) which lives in the lymphatic glands.

The influenza epidemic of 1918 carried off nearly a third of the people of Samoa, tuberculosis is increasingly attacking men and women of marriageable age, and measles is usually fatal. All these problems are also to be studied by the expedition, as well as the dysentery epidemic which has been particularly bad this year. It is hoped to be able to arrange for the training of two or three native women in each village for infant welfare work. Especially important will be the researches into the effect of high atmospheric temperatures and moisture on the European. Dr. Buxton is also expected to make a study of the birds of