

two fellowships are to be at the Georgia State College of Agriculture and Clemson College, South Carolina, to study methods of applying fertilizers as to time, placement and rate of applications on typical Piedmont and Coastal Plain Soils.

A STUDY of the agriculture of the Connecticut Valley, with particular reference to solving the problems of the tobacco growing industry, is being undertaken by the Connecticut Agricultural College, with the endorsement of the Connecticut Valley Tobacco Growers Association. As outlined by Professor I. G. Davis, head of the economics department, under whose direction the survey will be conducted, it will consist of four phases. When completed, it is hoped, it will lay the foundation for a continuously sound agricultural program for the Connecticut Valley.

THE first agricultural college in Burma was recently opened at Mandalay, according to *The Experiment Station Record*. A farm of 600 acres and facilities for a four-year course for 84 students have been provided. Special attention is to be given to the selection of better varieties of rice, beans, cotton and sugar cane, the study of plant diseases, silk culture and the building up of a pedigreed herd of pure Burma cattle.

UNIVERSITY AND EDUCATIONAL NOTES

THE residuary estate of the late Lewis B. Woodruff, ornithologist and lawyer of New York, has been left to Yale University "to further the interests of its museum." The amount has not been made public. In addition a permanent fund of \$10,000 is provided for the New York Entomological Society. The will suggests that the income be devoted primarily to the publication of technically illustrated monographs of groups within the field of the society's authorized activities. All his scientific collections and material on natural history are given to the American Museum of Natural History.

SIR CHARLES HYDE, proprietor of the *Birmingham Post* and the *Birmingham Mail*, has made a gift of £100,000 to Birmingham University.

THE late M. Douglas Flattery, of Boston, has bequeathed the sum of \$25,000 to Harvard University to be added to a trust fund for research in medicine.

PLANS to merge the Armour Institute of Technology with Northwestern University are under consideration. The institute would then become the engineering school of the university.

DR. CARL HEDBLUM, professor of surgery at the University of Wisconsin, has been appointed pro-

fessor of surgery in the school of medicine of the University of Illinois, Chicago.

DR. H. H. BEARD, associate in biochemistry at Western Reserve University, has been made senior instructor in biochemistry and acting head of the department.

AT Tufts College Medical School, Dr. Frank H. Dunbar has been appointed assistant professor of pathology and Dr. Edwin H. Place, assistant professor of pediatrics.

FREDERICK P. WEAVER has been appointed head of the newly established department of agricultural economics at Pennsylvania State College.

DR. JOSEPH BARCROFT, reader in physiology at the University of Cambridge, has been appointed to the chair of physiology in succession to the late J. N. Langley.

THE vacancy in the Regius Professorship of Physic at Trinity College, Dublin, caused by the resignation of Dr. John Purser, has been filled by the election of Dr. T. Gillman Moorhead, who has been for the last five years King's Professor of Materia Medica.

DR. SERGIO SERGI has been named a titular professor of anthropology at the Royal University at Rome, and director of the Anthropological Institute of the university.

DISCUSSION AND CORRESPONDENCE TRYPARSAMIDE

THERE has been some discussion as to the parts played by the workers at the Rockefeller Institute and the University of Wisconsin in regard to the initiation of the research on the therapeutic use of tryparsamide in neurosyphilis.¹ Dr. Brown states in his article in *SCIENCE* of October 16, 1925, that

"... this study was undertaken in response to a specific suggestion based on laboratory and preliminary clinical investigation" and "The connection of the Wisconsin group of workers with the development of tryparsamide was, therefore, essentially the same as that of Alt and other clinicians with the development of salvarsan . . ."

The obvious implication of these statements is that our study of tryparsamide in neurosyphilis at Wisconsin was initiated at the suggestion of Brown. The fact is that tryparsamide was but one of a considerable number of drugs studied by us in this connection. Of these, only three were obtained from the Rockefeller Institute.

¹ Jacobs, W. A., *Medicine*, 1924, iii, 191. Leake, C. D., *SCIENCE*, 1925, Sept. 18, p. 251. Brown, W. H., *SCIENCE*, 1925, Oct. 16, p. 350.

Under date of April 30, 1919, we made an application to the Interdepartmental Social Hygiene Board for an appropriation to make possible "An attempt to prepare mercurial and arsenical compounds which have a predilection for the central nervous system, in the hope of finding drugs more useful than any known in the treatment of syphilis of the central nervous system." This occurred three months before we communicated with the Rockefeller Institute group. The grant was actually made August, 1919. It is obvious, therefore, that our research, directed toward the therapy of neurosyphilis by new chemical agents, was conceived by the Wisconsin workers independently of the Rockefeller Institute group. We knew that the Rockefeller Institute workers had prepared and studied a number of new drugs in animal syphilis and trypanosomiasis. We desired to study their drugs from the viewpoint of neurosyphilis.

On July 17, 1919, we made our first contact with the Rockefeller group of workers, in a letter from Loevenhart to Brown, in which the following statements were made:

"We have received from the Interdepartmental Social Hygiene Board an appropriation of \$8,000 for the purpose of investigating improved methods for the treatment of syphilis of the central nervous system. We are very desirous not to spend time or money investigating substances which have been studied, but we should be delighted to start with a full knowledge of the work of Brown and Jacobs so that no time would be lost. *Have you studied the concentration of your various substances in the central nervous system or have you paid any attention to the advantages of your substances in the treatment of syphilis of the central nervous system?* We propose to study the distribution of arsenic in the body quantitatively and to find how such substances tend to be concentrated in the central nervous system. *We would be delighted to begin our study with any substances that you might be willing for us to test from this viewpoint.* It is entirely unnecessary for me to tell you that full and complete credit will be given to you and the institution for everything that you may do, and we desire not to encroach upon your preserves."²

In Dr. Brown's reply to this letter, bearing date of July 26, 1919, he stated all the different types of work in which they had been engaged but made no statement whatever regarding any contemplated work on the action of tryparsamide in neurosyphilis. On the other hand, he did state, "In fact, there are a number of substances on our list which I think would furnish material for a profitable investigation of the type which you contemplate. Needless to say, I should be very glad to have you take up any of these substances." The direct question, then, as to the con-

templated use of their substances in neurosyphilis was not answered, and they never mentioned at any time in correspondence or conversation that they had contemplated having such a study made.

The Rockefeller Institute at our request submitted three drugs which they were willing for us to study from our viewpoint, *viz.*, neurosyphilis. The conditions under which we worked were defined in a letter from Dr. Simon Flexner to Loevenhart under date of October 29, 1919. He stated, "If you would be interested in testing at your own discretion on animals and even on man such of the drugs as are now available for restricted and controlled use, we would be pleased to have you do so."

These drugs were studied along with many others which were prepared by us or obtained from other sources. One of the substances submitted by the Rockefeller Institute was totally inert, another was too toxic for human therapy, and tryparsamide alone proved to be useful in the treatment of neurosyphilis.

The Rockefeller Institute group, then, produced tryparsamide and thoroughly and carefully worked out its biological action in animals, including its tonic effect, symptomatology, toxicity, therapeutic value in animal syphilis and trypanosomiasis, and preliminary studies in acute and latent syphilis in man. Furthermore, they generally placed at our disposal the three compounds, free of cost, during the entire period of our therapeutic study up to the time of our first publication. They also placed in our hands all the information they had concerning the compounds. This spirit of cooperation shown by them, we are delighted to acknowledge and place on record. The Rockefeller Institute gave no financial assistance for our research.

Tryparsamide was not brought to us with the request that we use it in the treatment of neurosyphilis. We requested that we be allowed to study it along with many other drugs in an independently conceived, comprehensive effort to improve the treatment of neurosyphilis.

The two independent researches on the therapeutic application of new arsenical drugs at the Rockefeller Institute and at Wisconsin converged. Each was helpful to the other and there was a splendid spirit of cooperation. The Wisconsin group is happy in having played any part in this cooperative effort. The significant thing is that a contribution to the treatment of frightful disease has been made; the parts played by the two groups of investigators is of little importance but may be of sufficient historical interest to justify this statement.

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² Italics are not in original letter.