has started recently comprehensive studies of soil and fertilizer problems with a technical staff of about 15 men. They are making comparative studies of available plant foods in the soils of their province by the following methods: (a) Mitscherlich's pot experimental method, (b) Neubauer's method, (c) the citric-acid method and (d) microbiological methods. They are using field experiments also for the direct study of the value of fertilizers.

The Cotton Improvement Institute of the National Economic Council is making rather extensive studies of manurial experiments in relation to cotton culture. A technical staff of two men is directing these experiments in various regions where cotton is of importance.

A soil survey was started in 1930 in East and Central China by C. F. Shaw, of California. This work was arranged by Dr. Buck, of the University of Nanking, to aid in a survey of land utilization. The work was continued by the Soils Division of the National Geological Survey of China under the direction of Robert L. Pendleton for a two-year period. Special bulletins called "Soil Bulletins" are published by the geological survey. In 1933 James Thorp from the United States was placed in charge of the soil survey. Ten assistants have aided in the studies and a comprehensive summary of the results of the survey is now in press. The work will be continued under the leadership of K. C. Hou.

The Provinces of Chekiang, Kwangsi, Kiangsu and Kwangtung have established their own survey program and a great deal of work has been done in Kwangtung Province.

This rather brief summary emphasizes the extent to which studies of soils and fertilizers have been initiated in recent years. The present indication is that this phase of agricultural research will be expanded further in the near future.

Plant Pathology: According to the report of K. S. Sie in the Yearbook for 1935–36 work in phytopathology was initiated in 1924 and since that time there has been rapid progress. The Phytopathological Society of China was organized in 1929 and now has 36 regular members. Approximately half of the agricultural colleges in China have well-organized departments or laboratories of phytopathology. Rather extensive surveys have been made of the diseases of the more important crop plants, including studies of fruit diseases and of some vegetable diseases. Methods of disease control worked out in foreign countries or in China have been made available to farmers.

Studies of disease resistance have been or are being made, including resistance of millet varieties to smut and downy mildew, resistance of wheat to flag, stinking and loose smuts and resistance of barley to covered smut. Reports of progress show the value of breeding for disease resistance. In recent years studies of resistance to leaf and stripe rusts of wheat have been started at the National Agricultural Research Bureau. Native varieties are susceptible to both diseases, for the most part, but many foreign varieties from both Europe and America are highly resistant.

Copper carbonate dust and other seed disinfectants have been used successfully to control some of the smuts of cereals.

(To be concluded)

OBITUARY

J. ERNEST G. YALDEN

THE sudden death of J. Ernest G. Yalden, of Leonia, N. J., of a heart attack on February 22, 1937, has taken from the number of scientific workers a remarkable individual. A man of wide interests and unusual ability, he developed as an avocation such skill in those matters which attracted him that he became perhaps better known for his work at home than for the distinguished service which he gave in the field of practical education.

Born in England in 1870, Yalden received his early training in the typical boys' school of the period, to be followed by a course in civil engineering at New York University, from which he graduated in 1893. After a few years in the practise of his profession, he was encouraged to submit to the trustees of the Baron de Hirsch Fund a plan for the trade school which they were contemplating. His ideas were so well thought out and so well organized that he was invited to put them into operation.

He thus became the first superintendent and moving spirit of the school, which, until its recent absorption by the New York City system, operated most successfully along the lines indicated in the original plan. The reports of the school written during this period have been carefully studied by those concerned with training for craftsmanship, and many of the ideas have been put to use elsewhere.

Yet the native curiosity of the man and its accompanying thoroughness led him through a host of other experiences which were to profit many besides himself. An enthusiastic yachtsman, he designed and built various boats, from canoes to sea-going yawls, one of which, named by him the *Hippocampus,* has figured in boating literature.

A lover of boats who was fond of mathematics could

hardly escape the lure of navigation and the study of astronomy. It is not surprising then to find Yalden, always a keen student of Euclid, an enthusiastic and leading member of the Association of Variable Star Observers. At his home he built, from his own design, as he did everything else, a compact observatory in which he installed a 4-inch Clark telescope, and with painstaking care adjusted instrument and mounting with a precision rare in small observatories.

His observations on variable stars were characteristically accurate, and before long he had extended his program to include lunar occultations. This led naturally to cooperation with Brown of Yale. Recognition of the excellence of this work was not confined to this country, as his election to the Royal Astronomical Society will testify. However, his observing time was limited, for there were demands for observatory designs. A long list of observatories for colleges, schools and private individuals could be compiled from among the products of his drawing board.

Perhaps Yalden was most widely known as an authority on dialing. He computed many dials, personally constructed models in order to check by experiment, and designed a large number which have been erected in various parts of the country. At the time of his death he had nearly completed the full plans for a large dial of outstanding interest as well as the computations for another. A brochure on dialing came from his pen a short time ago, and his notebooks are full of original and novel dial designs and problems.

Those who knew him best will realize that in these few words only a part of his life has been sketched. It is appropriate in this journal to record a tribute to a late fellow of the American Association for the Advancement of Science, and that those who knew him but slightly may better picture the real Yalden it is right to add at least a suggestion of his skill as a musician, his early friendship with Winslow Homer, his ability in photography, his love of the garden, his charm and patience with the young people who went to him with all kinds of problems, scientific to personal, and not least his loyalty and steadfastness to his many friends.

From a wide experience and his orderly habits of thought Yalden had reached definite conclusions, which might well be considered by all who cherish ambition for achievement in science. Because it was characteristic of the man, he might have written as his message to them: "We know best those things which we do ourselves. Learn by doing."

H. W. FARWELL

WILLIAM ALANSON WHITE

THE following resolutions were passed on March 9 by the council of the Academy of Medicine of Washington, D. C., on the occasion of the death of their president, William Alanson White.

William Alanson White had the true vocation of a physician. His life work covered the period of modern psychiatry. This was no chance relationship, but a real identification, because he was one of the principal creators and interpreters of present concepts in this domain of thought.

To this task he brought the well-balanced talents of a convincing teacher, lucid writer and eloquent speaker. His eminent ability and tremendous energy made him an enthusiastic leader in every enterprise which had for its purpose the increase of knowledge and the more effective use of all measures applied for the relief of the mentally ill, and for the betterment of human relationships. These activities were recognized by institutions of learning which conferred upon him honorary degrees, and by learned societies which bestowed upon him many offices of high honor.

Acquainted as he was through official duties and personal ministry with the weakest and worst of mankind, as well as the strong and good, brought by accident to confusion or disaster, his absorbing preoccupation was the observation and interpretation of human behavior as a manifestation of the personality in all its conflicts and strivings for adjustment and satisfying expression. As a physician he brought to human problems the knowledge of a scientist, the insight of an artist and the gentleness of a brother.

It is then not surprising that he became a philosopher, but it is an index to the nobility of his character that with his knowledge he was still an optimist. There was no man whom he was not willing to help, and no tangled skein of human relationships was so desperate that he could not find some golden thread to follow, by which he could intervene in a helpful manner.

He once compared the field of consciousness to the area of a night-time landscape, illuminated and revealed by a search light, showing clearly a middle ground with shadowy borders. In the world his light has gone out, but the field upon which its rays fell will not again be dark.

Whereas, by the death of Dr. William Alanson White, the Academy of Medicine of Washington, D. C., has lost its first president and the membership a dear and admired friend,

Therefore be it resolved, by the council, on behalf of the academy, that the foregoing sentiments be adopted in appreciation of his worth and as an expression of personal sorrow of the membership, and that the same be recorded in the archives of the academy.

RECENT DEATHS

DR. LEWIS MUHLENBERG HAUPT, consulting civil engineer, from 1875 to 1892 professor of civil engineering at the University of Pennsylvania, died on March 10 in his ninety-third year.

DR. WILLIS G. GREGORY, for forty-six years dean of the School of Pharmacy at the University of Buffalo,