

1928; from the Agricultural and Mechanical College of Texas in 1932 and receiving the master's degree from the same institution in 1934. During the next two years he served as an assistant in the Texas Agricultural Experiment Station, engaged in studies upon the morphology of the cotton seed. In 1936 he entered Harvard University as a graduate student, completing the requirements for the doctorate in 1939. During parts of 1938 and 1939 he was employed by the U. S. Department of Agriculture in genetic investigations of cotton at Raleigh, N. C. Since 1939, until he entered military service, he was agronomist and cytogeneticist on the staff of the Texas Agricultural Experiment Station. As a First Lieutenant in the Infantry Reserve he was called into active service on March 5, 1942. Feeling that he might be more useful in the Chemical Warfare Service he was, at his own request, transferred to that branch. He landed in Oran in May, 1943, took part in front-line action in the Sicilian campaign and again in the Salerno landing, where he was fatally wounded while leading a small detachment in an attack upon an enemy-held farm house in front of the American lines.

Dr. Beasley is survived by his wife, Dr. Elizabeth Wagner Beasley of Carroll, Ohio, whom he married in 1940, and by his son, John Wagner Beasley, born in 1942.

Since Beasley grew up in a rural community, in a state where cotton is the all-important crop, and since he was by nature a student, it is not surprising that he should have turned his energies at an early age to the study of cotton. As an undergraduate he competed for, and won, a traveling scholarship for the study of cotton, and during the summer of 1932 he visited the principal cotton-growing areas of the United States and the important cotton merchandising and manufacturing centers of Europe. When he entered Harvard as a graduate student, under Dr. E. M. East, he began almost immediately a study of the genetics and cytology of *Gossypium* species. In spite of the difficulties of growing cotton species in the vicinity of Boston, even in the greenhouse, he succeeded in making considerable progress in a relatively short time.

In his research Beasley showed marked originality not only in devising new methods of attack, but also in adapting the techniques of others to his own problems. By the use of mixed pollinations to prevent the bolls from shedding prematurely and by employing embryo culture techniques, he succeeded in producing species-hybrids not obtainable by ordinary methods. He was one of the first to utilize colchicine extensively in doubling the chromosome number of sterile hybrids to produce fertile allopolyploids. These he investigated cytologically to contribute to

an understanding of the origin of cultivated cottons, a subject to which his more important published papers are devoted. He also utilized such hybrids in an attempt to transfer useful genes from wild 13-chromosome species to the 26-chromosome American cultivated cottons. His success at transforming sterile diploids to fertile tetraploids led him to suggest that hybrid vigor in such crops as maize might be perpetuated indefinitely by producing inversions and translocations with x-rays to the point where the  $F_1$  hybrid of two strains should be sterile, then doubling the chromosome number to produce a fertile true-breeding tetraploid hybrid exhibiting the heterosis of the diploid. The proposal, which has never been adequately tested, offers important theoretical possibilities in plant breeding.

Dr. Beasley was an industrious, capable and conscientious scientist motivated by a friendly spirit of cooperation, an intelligent curiosity and an eagerness to contribute to the improvement of cotton and to Southern agriculture in general. For such a task he was superbly fitted both by temperament and training, for he combined to an exceptional degree an appreciation and understanding of the theoretical principles of genetics, with an ability to apply those principles to practical problems of plant improvement. It is difficult to imagine a man of Beasley's type, thoroughly peaceful, scholarly, quiet and reserved, taking kindly to the art of warfare. Yet he was successful as an officer; popular with his men and respected by the officers above him. He has been awarded the Purple Heart posthumously for "military merit" and has been recommended for an additional citation for "continuous devotion to duty." One can not believe, however, that the supreme sacrifice which he was called upon to make as a soldier can compare in effectiveness with the contributions to scientific progress and to human welfare which he almost certainly would have made had his peacetime pursuits been permitted to reach fruition.

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#### DEATHS AND MEMORIALS

DR. DAYTON STONER, since 1932 state zoologist of New York, died on May 8 at the age of sixty years.

STUART BALLANTINE, since 1935 president of the Ballantine Laboratories at Boonton, N. J., known for his work in the field of radio engineering, died on May 7 at the age of forty-six years.

DR. WILLIAM SPENCER CARTER, from 1922 to 1934 dean of the medical faculty of the University of Texas, formerly associate director of the medical sciences of

the Rockefeller Foundation, died on May 12 at the age of seventy-five years.

DR. LOUIS LEROY, professor of the theory and practice of medicine at the University of Tennessee, died on May 9 at the age of sixty-nine years.

MEMORIAL HOSPITAL for the Treatment of Cancer and Allied Diseases, New York City, which is celebrating its sixtieth anniversary, is raising a fund of \$150,000 as a tribute to the memory of the late Dr. James

Ewing, who was associated with the hospital for thirty years both as president of the medical board and as director. Income from the fund will be used to support the undergraduate and graduate instruction for medical students at Cornell University Medical College and at the hospital, to finance at least two lectures annually on recent advances in neoplastic diseases and to support such special study as may seem advisable to the supervisory committee.

## SCIENTIFIC EVENTS

### THE INDIA COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH<sup>1</sup>

THE organization of industrial research in India, with a view to making her industrially self-sufficient, has been engaging the attention of the Government of India for some time. An Industrial Research Bureau had been established as a clearing house of industrial intelligence after the Sixth Industries Conference in 1934, but at the outbreak of war many sources of supply of finished products to India were either stopped entirely or much curtailed, and it became apparent that a central scientific and industrial research organization should be established immediately. Thus the Board of Scientific and Industrial Research was set up in April, 1940, for a period of two years in the first instance.

The functions of the board were to advise the Government as to the lines on which scientific and industrial research should be conducted, particularly as regards industries whose importance and possibilities were brought into the foreground by wartime conditions. The board was to utilize and coordinate the work of existing organizations and to make recommendations to the Government concerning the general lines on which industrial research should be pursued, and the specific problems which might be assigned to the technical staff directly under the control of the board, on the one hand, and to the various university and other scientific institutions on the other. The board consisted of four scientists, seven industrialists and one departmental head, with the executive council member in charge of the Commerce Department as chairman. It was to meet every three or four months. Research committees, composed of scientists and industrialists, were set up to examine and report on research schemes and watch their progress. Nineteen such committees were set up in the first two years.

When certain researches had reached a stage at which their commercial exploitation could be considered, an Industrial Research Utilization Committee was formed to settle the terms on which the researches

<sup>1</sup> From the *Journal of Scientific and Industrial Research*, Melbourne, Australia.

could be released to manufacturers. The committee, consisting mostly of industrialists, was under the board and contained representatives of industries and of the Chamber of Commerce.

In 1942, the Council of Scientific and Industrial Research was constituted to coordinate and generally exercise administrative control over the Board of Scientific and Industrial Research and the Industrial Research Utilization Committee. Its fourteen members are drawn mostly from the board and the committee. The council has been established on a permanent basis and is financed by the Industrial Research Fund, providing in the first instance an annual grant of 10 lakhs of rupees (about £75,000 sterling) for five years.

Since its formation, the board has been mainly occupied with the solution of urgent war problems, but it has devoted considerable attention to the organization of scientific and industrial research on a scale commensurate with India's expanding needs. Plans have already been prepared for establishing a National Chemical Laboratory, a National Physical Laboratory, a Metallurgical Research Institute, a Central Glass and Silicates Research Institute and a Central Fuel Research Station. When these become effective, India will be provided with facilities for research reasonably adequate to meet her immediate requirements.

In order to give publicity to the research activities initiated by or undertaken at the instance of the board, it was decided to publish the *Journal of Scientific and Industrial Research*, the first number of which appeared in October, 1942. Publication is quarterly, and copies may be obtained on application to The Secretary, Council of Scientific and Industrial Research, New Delhi, India.

### THE ESTABLISHMENT OF A DIVISION OF HIGH POLYMER PHYSICS IN THE AMERICAN PHYSICAL SOCIETY

DR. KARL K. DARROW, secretary of the American Physical Society, recently announced that a Division of High Polymer Physics had been authorized by the