orthopedic surgery. The Chicago Lying-in Hospital is now engaged in raising the last \$400,000 of the \$1,000,000 required for its funds, and gifts have already provided for the construction of the other hospitals.

The service of the University of Chicago clinics is available to all classes of patients, with special provision for persons of restricted means in both the outpatient department and the hospital. The clinics contain 6,660,600 cubic feet of space—one third of the total of all university buildings. The medical school of the university now represents an investment of twenty million dollars, seven millions in the buildings and thirteen millions in endowments.

THE BUREAU OF ENTOMOLOGY AND DR. L. O. HOWARD

AFTER more than thirty-three years of service as chief entomologist of the United States Department of Agriculture, Dr. Leland O. Howard retired on October 17 as the chief of the Bureau of Entomology, and was succeeded by Dr. C. L. Marlatt, a member of the department since 1888 and who for the past five years has been associate chief in charge of the regulatory work of the bureau, and also chairman of the Federal Horticultural Board.

Dr. Howard is now in his fiftieth year of government service, having joined the entomological branch of the Department of Agriculture in 1878, soon after his graduation from Cornell University. He retires as chief at his own request, but this does not mean retirement from service. He has passed his seventieth birthday, and has asked to be relieved of the administrative duties of his office, but proposes to devote his full energies to the field of entomological research, in which he has long been recognized as a most distinguished investigator. His special fields are medical entomology and parasitology.

Dr. Howard was placed in charge of the entomological work of the department on June 1, 1894. In the thirty-three years that have followed, the science of entomology has greatly broadened and Dr. Howard has guided numerous activities which have been of great service to the American public.

Two campaigns with which Dr. Howard has been identified are especially widely known. He was a leader in the mosquito crusade. As early as 1892 he published results of experiments showing that certain types could be controlled by the use of kerosene, and when the mosquitoes were identified as disease carriers he was able to recommend methods of control. His publications on the house-fly dating from 1896 to his book "The House-Fly Disease Carrier" in 1911, were largely responsible for the anti-house-fly crusades all over the world in the last twenty years.

Dr. Howard is a member of the National Academy of Sciences, the American Philosophical Society, and the American Academy of Arts and Sciences. He was permanent secretary of the American Association for the Advancement of Science for twenty-two years, and its president in 1920-21. He has been made honorary member of many foreign scientific societies and is the only American honorary member of the Academy of Agriculture of France, and received several decorations, among which are the Cross, Chevalier de la Légion d'Honneur, and the Cross, Officier de l'Ordre du Mérite agricole. He has been a delegate to many international assemblies and an officer of six scientific gatherings. In addition to bachelor's and master's degrees from Cornell, his doctorates include Ph.D. (Georgetown, 1896), M.D. (George Washington, 1911), LL.D. (Pittsburgh, 1911), and Sc.D. (Toronto, 1920). The bibliography of his publications includes 941 titles.

Dr. Marlatt, who succeeds Dr. Howard, joined the Department of Agriculture in 1888 and has been closely associated with Dr. Howard's administration. When Dr. Howard was made chief Dr. Marlatt became assistant chief, and in 1922 associate chief in charge of regulatory work. He was instrumental in promoting the passage of the plant quarantine act of 1912 and was appointed to administer it. Dr. Marlatt's specialities have been studies of scale insects, sawflies and periodical Cicadas, known as locusts.

Dr. Marlatt holds the degrees of B.S., M.S. and D.Sc., all from the Kansas State Agricultural College.

SCIENTIFIC NOTES AND NEWS

Dr. Homer Leroy Shantz, for the past year head of the department of botany at the University of Illinois and previously senior physiologist in the U. S. Bureau of Plant Industry, has been elected president of the University of Arizona, his appointment to be effective in September, 1928. Dr. Byron Cummings, head of the department of archeology, who has been acting president since the resignation of Dr. C. H. Marvin last February, has been named president of the university for the present year.

The John Fritz gold medal of the Engineering Foundation has been awarded to General John J. Carty, vice-president of the American Telephone and Telegraph Company, in recognition of having "done more than any other man toward the development of modern telephone engineering."

THE Leslie Dana gold medal, awarded annually to the person who has done most for the conservation of vision during the preceding year, was presented on October 18 to Dr. Lucien Howe, of Buffalo.