As a member in active attendance on the meetings of numerous national scientific bodies, he kept himself in close touch with the advances made in physics and engineering. He brought to this university and to his state valuable information gleaned from such associations, and shared it with others. He was himself active in research. As a result of his activities he was personally known to many of the leading physicists and engineers of the entire country, a number of whom have written letters of regret upon his untimely death and of highest appreciation for his personal friendship and for his contributions to science. The high estimate of his practical knowledge is attested by the fact that he served as consulting engineer to several large industrial corporations.

Before the establishment of a department of weights and measures in his state he labored gratuitously and tirelessly to secure the enactment of adequate and just legislation to regulate the use of weights and measures in the state, and after the establishment of a department of weights and measures in 1915, he worked zealously, as assistant commissioner of weights and measures, to help make this department useful and effective. His compensation for this was the satisfaction of knowing that he was helping to increase the sum total of honesty and square dealing among his fellowmen.

During the participation of the United States in the great war, Dr. Waggoner was chairman of the research committee of the state council of defense. He was also active in researches with industrial corporations engaged in the manufacture of munitions. In the early months of the participation of the United States in the war, he supervised the work of a class of young men taking training in radio signaling, and later had charge of a large signal corps training unit at the university.

Dr. Waggoner was broad in his views and many-sided in his interests. Native ability and scientific training guided him to well-based judgments. While tolerant of others' views, he was constructive and convincing in the presentation of his own views. Alert to every phase of civic and spiritual betterment, he showed himself in daily practice a sympathetic colleague, a kindly neighbor and a dutiful citizen. For young people he had especial sympathy, and he was active in encouraging their interest in religious and community life as in the pursuit of scientific knowledge. He had unusual zeal and energy. Hence, he labored without stint to advance the interests of youth, church, community and state. He had a strong moral courage. He therefore supported frankly and firmly, though with becoming courtesy toward adversaries, every cause which he deemed worthy of his espousal. His power of initiative and analysis made him a weighty advocate or a strong opponent. In him we find exemplified the finer qualities of scholar, teacher, colleague, neighbor and citizen.

ROBERT A. ARMSTRONG,
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JANUARY 10, 1923

SCIENTIFIC EVENTS

ANIMAL PATHOLOGY AT THE UNIVERSITY OF CAMBRIDGE

As has been noted in SCIENCE the senate of the University of Cambridge has accepted the offer of the ministry of agriculture of a sum of £30,000 to found a professorship of animal pathology. The London *Times* states that the foundation of the professorship is the first step towards the creation of an institute for research on animal diseases. It has long been felt with increasing keenness that the losses from disease among live stock have been unnecessarily large; that, in fact, a considerable proportion of these losses might be prevented by an extension of scientific research. This applies not only to those scourges which are widely advertised by the government measures adopted for their suppression, but to other more or less obscure diseases of which the farmer is aware, but about which the general public is ignorant. The aggregate losses from animal diseases amount to millions of pounds every year.

The expressed opinions of the farming community are said to have played a considerable part in inducing the ministry to make the present offer to Cambridge. Farmers have felt for some time that they could not go on bearing silently the losses caused by disease without making a determined effort to call in the aid of scientific research. Losses by disease may or may not be preventable, but whatever

the possibilities in this direction, the need for research can not be denied.

The first duty of the professor when he is appointed will be to prepare his plans, and it is understood that the government departments concerned are prepared to consider favorably schemes involving a total expenditure on buildings, staff and upkeep of £100,000 in the next four years. After that period the financing of the institute will depend upon circumstances. The million pounds voted under the Corn Production Acts (Repeal) Act, 1921, will be exhausted, and in the present state of depression it is impossible to foretell what may happen. If, however, the professor of animal pathology and his colleagues make good, financial assistance will no doubt be forthcoming.

The site chosen for the new institute is appropriate. Its headquarters will be placed in an extension of the School of Agriculture, where the new professor will have for his colleagues, among others, Professor T. B. Wood, Professor R. H. Biffen, Dr. F. H. A. Marshall and Mr. K. J. J. Mackenzie, who will assist him in directing his work on sound agricultural lines. His windows will look into the new biochemical laboratory, which is being built for Professor F. G. Hopkins, the discoverer of vitamines: a few yards away is the Molteno Institute, where Professor G. H. F. Nuttall pursues his studies in parasitology; the university medical school is only just the other side of Downing Street. The necessary paddocks, stables and animal houses will be provided at the field laboratories, which are situated just outside the town.

THE STERLING CHEMISTRY LABORATORY OF YALE UNIVERSITY

ON April 4, 1923, Yale University will formally dedicate the Sterling Chemistry Laboratory, a $2,000,000 structure and the first building erected by Yale from the funds made available by the bequest of John W. Sterling. The date chosen for the dedication has a historical significance at Yale, since on April 4, 1804, Benjamin Silliman, the first professor of chemistry in Yale College, delivered his first lecture on this subject. The dedication of this building will be an international scientific event, since English, Scotch, French, Italian, Dutch and Canadian universities are to be represented by a delegate from each of these countries. It also will take place during the meeting of the American Chemical Society in New Haven, when two thousand or more American chemists will be in attendance.

The Sterling Chemistry Laboratory is said to be the finest material plant in the world for the teaching of chemistry and the prosecution of research work. Entering the building one comes into a spacious lobby or entrance hall, with walls of stone reaching up to a high arched roof. Thence through massive arches one passes into a large cross hallway, paved with stone and with fumed-oak beams supporting its ceiling. Along this hallway and opening into it are classrooms and offices. In the north of the hallway are storage and stock rooms, a delivery court, shops and the laboratory of industrial chemistry, reaching from the foundations of the building to its roof. In this enormous room are placed pieces of apparatus of factory size. With its two galleries, its traveling crane, its lines of shafting and maze of pipes, this appears indeed a chemical manufacturing plant.

Passing up an imposing stone stairway one comes to the main floor of the building. To the front and opening from a similar hallway extending for two hundred and fifty feet across the building are other classrooms and two large lecture halls. On the opposite side of the hall are the offices of the faculty members. Along the two sides of the building are two narrow halls opening into a multitude of small private laboratories. The outer walls of these are the outer walls of the building. On the west side of the building, the walls thrust out into a projection surmounted by a tower. Below is the great side entrance with iron gates and massive doors, through which heavy trucks may pass into the building. Above is the library, furnished in dark oak with comfortable chairs, ample desks and tables, and at one end a fireplace. About the walls are thousands of volumes of chemical text-books and bound journals.

The whole center of the building is a space approximately one hundred and eighty by two hundred and fifty feet which is devoted to teaching laboratories. With the exception of the industrial chemistry laboratory which goes through to the first floor, all of these labora-