matters pertaining to their own research. Many of his students considered him cold and forbidding, but those who knew him best know that at heart he was a kindly old gentleman, always willing to be helpful to a student who was sincere and conscientious.

His death leaves a vacancy in the field of physiology which can not be filled. There are now left in the United States only two men who studied in Ludwig's laboratory, Professor Warren P. Lombard, of the University of Michigan, and Dr. Henry Sewell, of Denver, Colorado.

F. A. H.

WILLEM STORM VAN LEEUWEN

ON July the thirtieth there died in the prime of life one of the leading pharmacologists of Europe. Willem Storm van Leeuwen was born in Kampen, Holland, on December 7, 1882. The son of an army officer, he obtained his early education in the military academy of Breda. He was graduated as a cavalry officer and sent on service to the East Indies in 1905. There he contracted malaria, and he was forced to return to Holland in 1907, when he began his medical studies in Utrecht, receiving his degree in 1912.

His interests lay in research and he became an assistant to the famous pharmacologist, Rudolf Magnus, with whom he continued until the world war. During the war, Storm van Leeuwen substituted for Magnus at the University of Utrecht, delivering lectures and carrying on research until 1920, when he was made professor of pharmacology and director of the Therapeutic Institute in Leiden, where he was active until his death.

In 1919, prior to his appointment as professor in Leiden, Storm van Leeuwen made a visit to the United States, where he met many scientists and visited numerous laboratories. His impressions of America were described in a book which won for him many friends, on the one hand, and a number of enemies, on the other, because he never minced words, told the truth and denounced sham.

The earlier researches of Storm van Leeuwen dealt with anesthesia and narcosis. Another important earlier contribution was a study on the relation between the concentration and biological effect of drugs and poisons. This research led him into the fascinating field of synergism and antagonism of drug mixtures, in which he was a pioneer worker. In addition to miscellaneous researches on digitalis, belladona, ergot, vitamins, etc., Professor Storm van Leeuwen devoted much of his time during the last decade to the study of asthma, hay fever and various forms of allergy. Here some of his most valuable contributions to medicine were made. He was one of the earliest investigators to emphasize the importance of air conditioning; that is, of freeing the air of all allergic particles in connection with the treatment of patients suffering from such diseases. Being interested not only in theoretic pharmacology but also in its practical applications to therapeutics, Storm van Leeuwen combined his laboratory researches with clinical tests which he carried on in a private clinic of his own and also in the municipal hospital at Leiden. His studies on bronchial asthma and other allergic diesases led him into the domain of climatology and meteorology, so that in the last few years of his life he spent considerable time at Innsbruck, observing the effects of atmospheric electricity, ionized gases and various meteorological factors on physiological and pharmacological phenomena.

Professor Storm van Leeuwen's publications number more than 150, and fully half of them deal with various phases of anaphylaxis, allergy and allied conditions. Next in importance are his papers on synergism and antagonism of drugs. Other publications deal with the absorption of poisons, the influence of colloids on the action of drugs, the relation of avitaminosis to pharmacological action, the pharmacology of sulfur, salicylates, hypnotics, anesthetics, tuberculin and other drugs. He was also the author of several larger handbooks. The most important of these are his "General Pharmacology," written in Dutch, and his treatise on "Allergic Diseases," published in Dutch, German and English.

Professor Storm van Leeuwen was one of those pharmacologists who believed in combining laboratory experiment with carefully controlled clinical investigation; in other words, he made the practical application of pharmacology to therapeutics. Not only was Storm van Leeuwen an excellent lecturer and teacher, but he also possessed the rare ability of popularizing important scientific findings for the benefit of the intelligent laity.

Perhaps his most outstanding personal traits were his scientific sincerity, his devotion to and his admiration of scientific investigators, irrespective of social or political status, race or creed, and his hatred of hypocrisy and adulation in academic circles. He was no false hero worshipper nor devotee of what E. T. Dingwall, psychologist, has recently termed "the new witchcraft, under the spell of which the scientific manner of thinking is forgotten and the student accepts conclusions because they are advocated by some person of prominence." It was probably for this reason that he disliked the modern Nazi "kultur," but was a lifelong friend of such German scholars as the late Maximilian Harden, Rudolf Magnus, and others.

The death of Storm van Leeuwen is a heavy loss not only to his family and friends but also to all those seriously engaged in the pursuit of scientific truth in general and of pharmacology in particular.

DAVID I. MACHT