

Alphabet Story—V

Dr. Ernest Volwiler

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As the United States grew increasingly internationally involved over the course of World Wars I and II, new demands were placed upon the country's growing pharmaceutical industry. Dr. Ernest H. Volwiler, a Lake Forest local, combined both human and industrial aspects of chemistry in order to better supply Americans both on the battlefield and at home. His numerous advancements within anesthesia, penicillin, and other basic battlefield medicines not only aided wounded soldiers, but also supported America's confidence in its self-sufficiency in the mid-twentieth century.

Volwiler was born in 1893 in rural Hamilton, Ohio. His parents, recent immigrants from Germany, encouraged hard work and self-improvement. Although they depended on their children's hands for farm work, the Volwiler parents were also advocates of education, sending Ernest and his older brother Albert to a local public school. Ernest graduated high school at age sixteen at the top of his class. In order to raise enough money to follow in his brother's footsteps at Miami University in Oxford, Ohio, Ernest taught local primary school for one year.

Entering college, Dr. Volwiler set upon becoming a teacher. But, after attending a lecture on chemistry, he was fascinated by the intricacies of the science and ultimately specialized in it, volunteering as a teacher's assistant in the labs. After graduating from Miami of Ohio in 1914, Ernest considered pursuing a career in chemical warfare research, as many of his former classmates had done. However, passing in the hallway after graduation, his professor encouraged him to get a PhD or warned Volwiler that he "wouldn't be able to do anything." Ernest received his Masters and Doctorate degrees from the University of Illinois at Urbana-Champaign, graduating in 1918.

Throughout the time of Volwiler's graduate schooling, chemistry students were increasingly called upon to serve the country's growing pharmaceutical field in the face of World War I. The government encouraged the chemical industry to aid America in becoming less dependent on German and other European medicinal imports. Abbott Laboratories, recently moved to its North Chicago location, immediately hired Volwiler after graduation to fulfill Navy orders for German-imitating synthetic drugs. As the German blockade prevented popular drugs, especially anesthetics, from reaching the United States, research facilities were vital to the health of not only the military abroad but also the home front.

In between World Wars I and II, Volwiler rose through the ranks at Abbott. His career reflected Abbott's expansion. The company could now focus on the human aspects of drugs and medical advancements. Dr. Volwiler directed research for new user-friendly anesthetics and burn relief, ultimately discovering Pentothal in 1936 with his research partner, Donalee Tabern. The drug more smoothly and completely induced anesthesia and greatly helped soldiers on the World War II battlefield three years later. Pentothal was the first anesthetic without psychological side

effects, ultimately leading to a variety of similar compounds within popular medicines. In 1986, Volwiler and Tabern were inducted into the Inventors Hall of Fame for Pentothal and its positive effects on modern American medicine.

During World War II, Volwiler and Abbott continued to expand its battlefield and home front drug research. With better processing of plasma and penicillin, the company was responsible for saving the lives of thousands of injured soldiers. Ultimately, Abbott received five Army-Navy "E" Awards for excellence in production of wartime supplies.

Dr. Volwiler became director of research at Abbott in 1930 and held a number of positions culminating in Chairman of the Board in 1958. In 1945 when he was selected to join the US Chemical Warfare Service teams of leading industrial, chemical, and pharmaceutical experts to follow US armies and collect chemical information for the war against Japan.

As World War II slowly drew to an end, Abbott Laboratories maintained its international presence. Despite the economic and social challenges of the World Wars, the conflicts also inspired the growth of the American pharmaceutical industry and therefore the country's self-sufficiency and pride. Rising through the ranks at Abbott, Dr. Ernest H. Volwiler personified the innovation and determination central to America's mid-century identity.