

**Centenary Graduation of Dr. Carlos J. Finlay**

**CARLOS J. FINLAY, M. D. — 1833-1915 Class of  
1855, Jefferson Medical College**

Carlos J. Finlay was born in Camaguey, Cuba in 1833- His father was a Scath physician, his mother was French. His early education was by private tutor. At the age of eleven he was sent abroad for schooling in France and Germany. The process of education was frequently interrupted by illness but he achieved a solid foundation in the classics, history mathematics, geography, physics, and languages. For the latter he had great facility and insisted upon this all the life—breakfast was always in Spanish, lunch in English, and dinner in French. Presumably, he reserved German for certain other periods.

In 1853, at the age of 20, Carlos Finlay came to Philadelphia with his uncle, Philip de Barrés, and both registered at the Jefferson Medical College. But Finlay signed with the name Charles and on October 27th paid the matriculation fee of \$5, and the course fee of \$15. On the 17th of October, 1854, he registered for his second year. At that time he paid another fee of \$15 and indicated that his preceptor was S. W. Mitchell. In reality he was the first pupil of Weir Mitchell and his first disciple: this was the beginning of their lifelong friendship. He received his doctor degree on March 10, 1855. No record of his thesis has been found.

Following his graduation he evidently spent an additional year with Weir Mitchell in Philadelphia but in 1856 he began a series of travels, which included a period in Paris of post graduate study in ophthalmology. He finally began permanently to practice medicine in Havana in 1864. His great interest in epidemiology and public health began in 1867 when Havana suffered from a severe epidemic of cholera. His logical reasoning showed that the disease was water-borne and he traced one phase of the epidemic to the original case. His views were, however, so opposed to those of the time that his communication was refused publication.

During the next few years he undertook to investigate the matter of yellow fever in spite of his busy practice. The basic equipment was the microscope which he had brought from Philadelphia. His long series of publications on yellow fever began in 1872. In due course he became established as a foremost authority on this disease, first officially recognized in 1879 when the Governor General appointed him to cooperate with the United States Commission on Yellow Fever. He served several similar appointments in the following years; perhaps the most notable was as Chairman of the Yellow Fever Board organized in 1899 by the provisional government of Cuba; this group worked closely with the United States Army Board headed by Walter Reed. In 1902, at the end of the military occupation, Finlay became Chief Sanitary Officer of Cuba—a position from which he retired in 1909 at the age of 76.

In February 1881, as a representative of Cuba and Puerto Rico to the International Sanitary Conference in Washington, Finlay first presented his argument as to the necessity of an intermediate agent to explain the transmission of yellow fever. This idea was completely original, independent and thoroughly heretical. In August of the same year, Finlay declared the vector to be the mosquito now known as *Aedes aegypti*. Prior to the latter announcement Finlay had undertaken the experimental inoculation of informed volunteers by the use of infected mosquitoes. He believed that he succeeded in these first attempts. His subsequent attempts (the total amounted to 102 during twenty years) were perhaps less convincing. In retrospect it is almost impossible to evaluate these experiments, because the difficulties in clinical diagnosis were then, as now, enormous. Certainly the theory was completely established by the work of the Army Board headed by Walter Reed. No reader of Finlay's original reports can escape the idea that this extraordinary man, without resources and without the spiritual support of his colleagues at the time, actually managed a very considerable affair of much daring and of enormous originality. Considering the state of knowledge of those times this man stood far ahead.

Although history has marked Finlay for his work on yellow fever, his interests were wide. He made significant contributions in the field of leprosy, beri beri, filariasis, trichinosis, relapsing fever, cholera, tuberculosis, and many other topics.

Finlay was rather firm in his convictions. During twenty years he gained only one follower for his mosquito theory but he continued to proclaim it at every opportunity and was considered something of a crank. He added to his reputation as a determined individual when at the age of 65 he joined the American Army as a Contract Surgeon and undertook active duty with the troops in Cuba.



DR. SILAS WEIR MITCHELL. Finlay's professor.

Jefferson Medical College recognized the quality of Finlay and his work by awarding him the honorary degree of Doctor of Science in 1902. It was also at about this time that he was proposed by his friend, Weir Mitchell, for honorary fellowship in the College of Physicians of Philadelphia. He received many honors in lifetime from many nations and from many scientific bodies.

Carlos Finlay died on August 20th, 1915. By that time he had become a hero. The ensuing years have dealt well with the man and with his work. There is a Finlay Institute in Havana, a Laboratorio Carlos Finlay in Panamá, a Finlay Institute in Colombia. There are Finlay streets in various cities. The Pan American Medical Congress celebrates Finlay's birthday, December 3rd, as the official Day of American Medicine. The commemoration of the centenary of Finlay's graduation is a proud moment, because Jefferson is greatly honored by its relationship to the "poor practitioner" who became a prophet.

