Edward Singleton Holden

Edward Singleton Holden (1846-1914) was the mathematician who successfully broke a code in a challenge that appeared in the *New York Tribune* in 1878, when he worked at the U.S. Naval Observatory. Holden was born in St. Louis but attended a secondary school in Cambridge (MA) before attending the Academy associated with Washington University 1860-1862. He then enrolled in that university and graduated with a BS in 1866. While an undergraduate, he was inspired to pursue astronomy by the famous mathematician William Chauvenet, who employed him as an assistant in the observatory. Upon graduation, Edward Holden became a cadet at West Point, where he matriculated 1866-1870 and received a second degree (finishing third in his class) as well as a commission. He then spent a year as an artilleryman.

The year 1871 was critical for Holden, as he accepted an instructorship back at the U.S. Military Academy and got married. He and his new bride remained at West Point for two years before he was appointed professor of mathematics in the U.S. Navy at the Naval Observatory in Washington, DC, where he was an assistant to Simon Newcomb for four years and then Asaph Hall for five. It was during this time that Holden decoded the political messages. He moved to the Washburn Observatory at the University of Wisconsin in 1881 but left after four years to become president of the fledgling

University of California at Berkeley. Although he held this post only 1886-1888, he was simultaneously the director of the Lick Observatory on that campus, a position he continued 1888-1897. During that time, he became a trailblazer in the use of photography for locating astronomical bodies. Holden left California for New York City in 1897 and four years later was appointed librarian of the U.S. Military Academy, the post he held until his death 13 years later.

Elected a member of the National Academy of Sciences, Edward Holden is mainly known today for his advances in astronomy. However, his NAS biographer stated that among his wide range of accomplishments were "the celebrated cipher dispatches of 1876 relating to the election of a President of the United States in that year." Over half of that 26-page biography is devoted to Holden's remarkable bibliography of writings from 1872 to 1905.

Footnote:

¹ On p. 356 of W.W. Campbell, Biographical memoir of Edward Singleton Holden 1846-1914, *Biographical Memoirs of the National Academy of Sciences* **8** (1919), 345-372.