

Abbot Lawrence Rotch: Observer extraordinaire

Jinny Nathans

American Meteorological Society, Boston, USA

jnathans@ametsoc.org

Born in Boston in 1861 into a leading New England family, Abbott Lawrence Rotch graduated from MIT in 1884 with a degree in mechanical engineering. Interested in meteorology even as an undergraduate, he conceived plans for a New England observatory for the study and research of meteorological phenomena at Great Blue Hill in Milton, Massachusetts, the highest point above sea level (635 feet) on the Atlantic coast south of New Hampshire. When it was completed in 1884, Blue Hill Meteorological Observatory was one of the first observatories to be equipped with self-recording instruments and began its recordkeeping in February 1885. Rotch equipped and maintained it during his lifetime, ensuring its continuation by endowing it with a bequest at his death. A professor of meteorology, as well, at Harvard University (the first such position at Harvard), Rotch traveled extensively to Europe to study meteorological stations there and wrote articles describing his travels for the “American Meteorological Journal”. He made extensive handwritten notes and collected photographs of worldwide meteorological phenomena. Rotch was a pioneer in the regular use of kites and balloons to lift instruments into the atmosphere to take measurements and was convinced that the success of manned flight was simply a matter of time; he also became an expert mountain climber in order to make first hand observations in Europe and North and South America. Serving on the international jury of awards for instruments of precision at the Paris Exposition in 1889, he received the decoration of Chevalier of the Legion of Honor from the French government. A fellow of the Royal Meteorological Society and member of the American Philosophical Society, Rotch was also one of the guiding forces of the New England Meteorological Society, a precursor organization of the American Meteorological Society. Rotch died in 1912.

Some of Rotch’s notebooks have come to light while consolidating materials for offsite storage during a renovation of the Headquarters building of the American Meteorological Society in Boston two years ago. This presentation covers Rotch's establishment of the Blue Hill Meteorological Observatory and the notebooks of clippings and observations he kept of worldwide meteorological phenomena. It will also discuss his travels to other European observatories and his correspondence with even more far-flung observers and how he transferred this collected information into material which was then regularly published in the *Monthly Weather Review* and other journals. A sidelight is his collection of some of the earliest photographs of routine occurrences such as clouds and lightning and of other observatories. The presentation is based on archival records at Harvard, Blue Hill, the American Meteorological Society, and the Metropolitan District Commission.