Two Pioneer 19th-Century Women Who Breached Ophthalmology’s Glass Ceiling
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This editorial pays tribute to the first 2 women who became regularly trained ophthalmologists in late 19th-century America. After the graduation of Elizabeth Blackwell from Geneva Medical College in 1849 and the establishment of the Women’s Medical College in Philadelphia the following year, a gradual trickle of female physicians entered the ranks of the medical profession in the United States. Yet an even more formidable barrier existed for more than half a century subsequently for any woman who sought to enter a training program in a medical or surgical specialty.

The first American women to take specialized training in ophthalmology were Isabel Hayes Chapin Barrows (Fig 1) and Elizabeth Sargent (Fig 2). Although they practiced on different coasts, the paths of these female ophthalmologists would cross, but not connect, at the University of Zurich and later Howard University in Washington, DC, in the late 1800s. Why these women? Why these institutions? The latter question is the easier to answer given the limited medical education resources for women at that time. The American Medical Association (AMA), the dominant organization regulating mainstream United States medicine, did not admit women until 1915, and women also were banned from attending most so-called men’s medical colleges as medical students and from the specialty training that they offered.1 In marked contrast, in Zurich, women were allowed to audit classes when the university opened in 1833 and were admitted as students to the medical school in 1864.2 Between 1868 and 1915, 54 North American women were registered at the University of Zurich College of Medicine.2 Howard University, founded on liberal principles, had a similar reputation in the United States, opening its doors in 1867 with 5 female students.3

Why these women? This is a more complicated question that can be answered only by exploring their personal lives and challenges. Born in 1845, Isabel Hayes Chapin Barrows spent her early life at the side of her father, a family doctor, whom she helped on house calls by tending to wounds and packaging medications. Her schoolteacher mother likely enhanced her love of learning as she mastered the formal Andrews and Stoddard’s Latin grammar and translations from Virgil and Nepos.4 At a young age, she also developed an interest in phonography, a practice of transcribing speech by using symbols representing elements of sound. The practice is also known as phonetic transcription.

Missionary work, however, seemed to be the biggest influence in Isabel’s pursuit of medicine as a career as well as a lifelong commitment to human rights issues. Traveling with her husband, William W. Chapin, to India in 1863 broadened her horizons, but misfortune would plague the trip when Isabel miscarried their first child.5 In another tragic turn, just 3 months into their journey, her husband died of diphtheria, and the 19-year-old Isabel returned to the United States to obtain a medical education.4

While working at a sanatorium in Danville, New York, to earn money for her schooling, she was introduced to a stenographer named Samuel June Barrows, who would become her second husband. Initially unable to afford a wedding in 1866, they arranged a betrothal ceremony in which they promised to support each other financially and emotionally to achieve their personal goals.5 They officially married in 1867, and she followed her husband to Washington, DC, when he was asked to serve as stenographer for the Secretary of State. When Samuel Barrows contracted typhoid fever, Isabel once again put her medical education on hold to take over his job while he recovered. Although she did not set out to be a pioneer in the stenography field, her position made her the first woman to be employed by the State Department and to receive equal pay for her work.4

After her husband’s recovery, she was finally able to continue her medical pursuits. The stenography skills she developed were invaluable in her note taking for her coursework. Dr. Barrows developed an interest in surgery when she attended medical school at the Women’s Medical College of the New York Infirmary for Women and Children and at Bellevue Hospital in New York.

She then traveled to Zurich in 1869, where she studied with Professor Johann Friedrich Horner at the Hottinger Hoff, and it is here that she developed her love for the eye. She also spent time at the clinics of Ferdinand Arlt and Eduard Jaeger in Vienna. There, Professor Jaeger invited her to perform a cataract operation before him and his startled students. She did it quickly and smoothly without anesthesia and “without a tremor,” and the impressed Jaeger declared, “Frau Doctor! Heute haben Sie ihre Knechten Sporne [sic] gewonnen!” (Today you have won your spurs of knighthood.)4

On completion of her training, Dr. Barrows purchased 100 dollars worth of eye instruments and returned to
Washington, DC. She had a sign painted “to tell the world that there was [a woman] oculist,” and hung it outside her office at 628 F Street. She was the first woman to have a private practice in medicine in Washington, DC. Between 1870 and 1873, she was in charge of all of the eye and ear cases at Freedman’s Hospital and lectured on these subjects at the Howard University Medical College, where she was one of the first woman professors. The faculty knowingly risked censure by the AMA for hiring Dr. Barrows in 1871, although she was well educated and had qualified for the Pomeroy Professorship in Ophthalmology. Her employment likely violated the consultation clause from the AMA’s Code of Medical Ethics, which required physicians be “recognized by this Association.” Although the AMA Committee on Ethics strongly advocated the recognition of regularly educated and qualified female physicians in 1868, the first female member of the AMA was not admitted until 1876.

Family ultimately came first for Dr. Barrows, who left the profession in 1873 to follow her husband into ministry in Massachusetts and to care for her newborn daughter and a nephew after her sister-in-law died in childbirth. She continued to pursue human rights interests, most notably travelling to Russia to try to free Catherine Breshkovski, known as “the little woman of the Russian Revolution,” who was imprisoned for more than 20 years for trying to teach peasants working on her estates to read. Unfortunately, Dr. Barrows’ efforts ultimately were unsuccessful. Her daughter, Mabel Hay Barrows Mussey, summed up her mother’s life best in a dedication to a book of hymns she compiled after her mother’s death in 1913: “In memory of Isabel C. Barrows whose life was a hymn of love, joy, and service.”

Little is known of Elizabeth Sargent’s early life, but it is likely that from her birth in California in 1857, her childhood was influenced by a politician father and an activist mother. Her father, Aaron A. Sargent, was a United States Senator from California, and later became United States Minister to Germany. Her mother, Ellen Clark Sargent, was a women’s suffragette and authored a critical part of the 19th amendment to the United States Constitution establishing women’s suffrage. Elizabeth herself took up the suffragist cause as a young woman. She was chair of the Committee on Petitions for Northern California and helped her mother entertain guests, including Susan B. Anthony, President of the National American Woman Suffrage Association, and Dr. Anna Howard Shaw, a prominent figure in the women’s rights movement who earned her medical degree from Boston University Medical School, but never practiced medicine. The Sargent family also contributed large sums of money to the cause of women’s rights.

The second female ophthalmologist to practice in the United States, Dr. Sargent also attended Howard University Medical College, taking course work from 1876 to 1879 before receiving her medical degree from Cooper Medical College (initially called Medical College of the Pacific and eventually becoming Stanford University’s School of Medicine). She was 1 of a dozen women to receive diplomas and passed her examinations with highest credit. Her father’s position in Germany afforded her the opportunity to take

Figure 1. Isabel Hayes Chapin Barrows.

Figure 2. Elizabeth Sargent, courtesy, California Historical Society (CHS2014.I826).
ophthalmic training in Zurich in 1882, following the footsteps of Dr. Barrows in studying with Professor Johann Friedrich Horner. Dr. Sargent settled in San Francisco, where she became recognized as one of the city’s leading eye specialists. Although she never married or had a family of her own, she loved caring for children. She was so passionate about children’s healthcare that she, when graduating from medical school, “gave up her commencement black silk dress and deposited the money with the Pacific Dispensary for Women and Children’s hospital in San Francisco to pay the rent to keep it open for another month.”

She was later appointed ophthalmologist to the Pacific Dispensary for Women and Children, where her practice focused on pediatric ophthalmology. As she continued her women’s suffrage work, Dr. Sargent reported on her experience in medicine in Northern California writing, “Women are admitted on equal terms with men to the medical and dental departments of the State University [University of California, Berkeley], and to the Cooper Medical College of San Francisco...Among these physicians, two make a specialty of the eye and ear, one in San Francisco and one in San Jose...In April, 1875, the Pacific Dispensary for Women and Children was founded by women...I have written thus lengthily that you may see how energetic our women have been originating and carrying on such an institution.” In 1892, she published a paper in Herman Knapp’s *Archives of Ophthalmology* on ocular complications in pernicious anemia. Before Dr. Sargent’s death resulting from endocarditis in 1900, she traveled to an international ophthalmology meeting in Germany as a representative of the AMA Section on Ophthalmology.

These 2 women, Drs. Barrows and Sargent, with the common thread of educated, supportive parents and an innate desire to better the lives of women and others suffering from human right abuses across the globe, set the stage for the future of women in ophthalmology. According to a communication from the American Board of Ophthalmology, between 2005 and 2014, 37% of candidates taking the Written Qualifying Examination were women. Drs. Barrows and Sargent, along with other trailblazers like Amy Stokes Barton, Louisa Paine Tingley, and Edith Cogan, led the way in gaining admission of women to our specialty. The contributions of these women are important and deserve recognition in our ophthalmic history.

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References