

The Truth in a Nutshell

The Legacy of Frances Glessner Lee

By Katherine Ramsland, M.A., Ph.D., CMI-V



Although the past century in forensic science has yielded many innovations, few women have been credited with advancing the field. A notable exception is Frances Glessner Lee, daughter of John Jacob Glessner and heir to the International Harvester fortune. Defying her father's attempt to protect her from the outside world, she found a way to make a significant contribution to the arena of death investigation. In a 1949 article for the *Coronet*, George Oswald described her: "A queenly looking woman with the high, white coiffure and the tiny gold-rimmed eyeglasses is known as a passionate crusader for justice and a tireless lobbyist for reform." Lee was one of a kind.

▲ Frances Glessner Lee constructing a miniature crime scene in the 1940s. PHOTO/GLESSNER HOUSE MUSEUM

Born March 25, 1878, in Chicago, "Fanny" was raised in privilege and privately tutored. She aspired to study law or medicine, but her father refused to allow her to attend a university. Off went her older brother George to Harvard, which seemed to her unfair, but it would prove fortuitous. He met George Burgess Magrath, who was working on his MD at the medical school and who hoped to have a career in pathology. Magrath often visited the Glessners at "the Rocks," their thousand-acre summer estate in New Hampshire, where he mesmerized Frances, a fan of Sherlock Holmes, with stories about death investigation.

After Magrath became the medical examiner for Suffolk County in Massachusetts, he confided to Lee the need for the training of death investigators, especially because coroners in many states were not required to have medical degrees. He thought medicine should be part of their background, because accurate assessments required familiarity with such things as the nuances of wounds and the physical symptoms from different types of poisonings. She asked what she could do, and Magrath encouraged her to assist with developing a prestigious flagship program at Harvard, so she moved to the Rocks to have easier access.

In 1931, Lee used her fortune to help establish Harvard's Department of Legal Medicine, with Magrath as first chair. In his name she donated a library of more than 1,000 books and manuscripts, many of them rare, and endowed a sizable grant. With Lee's support, Harvard was able to mount conferences and seminars to train students to become medical examiners. The program flourished, but Magrath did not have long to enjoy the fruits of his collaboration with Lee—he died in 1938. She was heartbroken, but she continued to support the vision. Her next move was truly innovative.

The Surprise Factor

Fascinated with the "surprise factor"—the way small clues could quickly divert an investigation onto a new track—Lee taught herself everything she could about crime investigation. She knew that inexperienced police officers often committed errors when trying to determine manner of death, largely due to missing the clues. To mitigate this, she devised a practical solution: build crime scenes on which they could practice—in miniature. Lee already knew how to make miniatures. When she was 35, she had spent 2 months creating a replica of 90 musicians in the Chicago Symphony Orchestra, all fully garbed and each with a musical score and specific instrument. Then for two years she worked on a similar project involving four musicians, which was so minutely detailed the men on whom she based it were astonished. She would now turn her talent and passion for such projects toward fighting crime.

Lee's motto, inspired by a detective, was "convict the guilty, clear the innocent, and find the truth in a nutshell." Thus, she dubbed her project the "Nutshell Studies of Unexplained Death." Setting aside the second floor of her four-story mansion as a





▲ This portion of a kitchen crime scene where a cook apparently perishes from gas poisoning, shows a clue—material stuffed around the door frame, presumably to hold the gas in. PHOTO COURTESY CORINNE BOTZ.

workshop, she filled one room with doll-size furniture from her international travels. Then she hired a full-time carpenter, Ralph Mosher (and then his son) to craft the small buildings. From cabins to three-room apartments to garages, each was fashioned from her design, on a scale of one inch to one foot. She instructed Mosher to make doors and windows that actually worked, with shades that rolled up and working locks with mini-keys. For her own delight, she sometimes used wallpaper patterns from her own household, and in some rooms Lee even placed tiny dollhouses with which the children might play.

Mosher and his son turned out about three Nutshells per year, each of which cost the same as an average house in those days. Lee herself made the dolls by hand, using a cloth body stuffed with cotton BB gun pellets and bisque heads. She painted the faces and stitched the clothes, adding sweaters and socks knitted on straight pins. Once each doll was ready, Lee would decide just how it should “die” and proceed to stick a knife in one, drown another, or hang one up with a noose. On each, she would paint the appropriate colors of decomposition. The

majority of victims were female, and some were children—even a baby. All were Caucasian, and many lived in deprived circumstances.

In the rooms or yards, Lee placed tiny cigarettes she’d rolled, clothespins she’d whittled, books or newspapers she had prepared, and prescription bottles with labels she had printed by hand. One room even had crushed-out butts in an ashtray. Sometimes Lee used items from charm bracelets or Cracker Jack boxes, and a “mouse” caught in a trap was made from a pussy willow bud. Among these items were clues to the manner of death—an open beer bottle where none belonged, broken glass, bullet casings, or a pile of letters.

To create each crime diorama, she blended several stories, sometimes going with police officers to crime scenes or the morgue, sometimes reading reports in the newspapers or interviewing witnesses, and often using fiction. She preferred enigmatic scenarios, where one had to examine all the clues before deciding on a conclusion, including items that did not initially appear significant. In the scenario called “Burned Cabin,” for example, a young man who escaped a nighttime fire that killed his uncle is fully dressed, undermining his story of an unexpected accident. Lee based this on a 1943 crime, and after the mini-cabin was assembled, she used a blowtorch to incinerate parts of it.

The Seminars

Once Lee had several “dollhouses of death” completed, she used them as part of the week-long seminars she sponsored at Harvard twice a year for the many different professionals involved in law enforcement. The only woman in attendance, she sent out invitations to police officers from around the country. One day of each week was set aside to showcase the Nutshells, which were kept in a temperature-controlled room. Participants were granted a limited period of time to look at each crime scenario, take notes of what they observed, and report back to the others. The point was not to “solve” the crime but to notice important evidence that could affect investigative decisions. By the time Lee finished her ambitious project, she had 19 Nutshells.

In a written instruction, Lee urged those preparing to observe a scene to imagine themselves as less than half a foot tall. She also advised that, to accomplish a methodical examination, they adopt a geometric search pattern. They were to look at the entire scene, searching for any and all clues, because some were not obvious. There might be a bullet caught in a ceiling, a pattern of blood that contradicted an obvious interpretation, or a weapon in an odd position. Lee would pen spare descriptions to assist, such as one referring to a crime that “occurred” on April 12, 1944: “Mrs. Fred Barnes, housewife, dead.”

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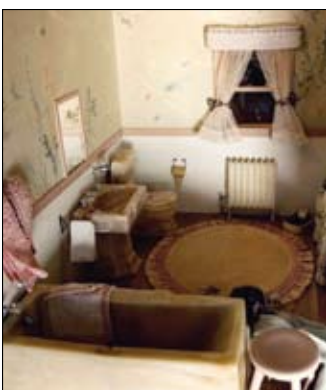
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▲ Photographer Corinne May Botz has compiled the definitive look at the crime scene dioramas by Frances Glessner Lee. Her book, "The Nutshell Studies of Unexplained Death," was published in 2004 and contains 225 pages of fascinating color photographs. It is available at www.amazon.com.

In each scene, she included items that were not apparent unless one looked carefully, such as a purse under the bed or a smudge of lipstick on a pillow slip. What seemed a suicide, for example, might change when a key item was noted—a fresh-baked cake, a load of freshly laundered clothing, and an ice cube tray beside a woman's body on the kitchen floor. Other scenarios included a bound prostitute with a sliced throat, a man hanging in a wooden cabin, a boy dead on a street, and an apparent murder/suicide.

Included in the seminars was a magnificent dinner at the Ritz Carlton, served on expensive china that Lee had purchased and used exclusively for the occasion. Many in attendance had never experienced such luxury, and a few came to refer to Lee as "Mother." One trooper told her that the Nutshell Studies had helped him learn how to handle difficult cases. If not for the challenge she had posed, he might not have been as careful as he'd now become. Such compliments confirmed for her that the intense effort and the \$60,000-plus that she had spent was entirely worthwhile.

On the anniversary of the first Harvard seminar in 1946, graduates came together to form the Harvard Associates in Police Science (HAPS), and each graduate thereafter become a member. The seminars were so successful they inspired similar teaching tools in other states.

By 1949, some 2,000 doctors and 4,000 lawyers had been educated at the Harvard Department of Legal Medicine, and several thousand state troopers, detectives, coroners, district attorneys, insurance agents, and even reporters had attended Lee's seminars. They would continue successfully for several more years.

Honors

In 1943, Frances Glessner Lee received an honorary appointment as a captain of the New Hampshire State Police, which made her the first woman to hold such a position.

In addition, she became the first female invited into the International Association for the Chiefs of Police.

When her eyesight finally failed, her doctors forbade her from working, so she had a radio installed in her room to listen to the police reports. She wrote encouraging letters to chiefs of police and spoke passionately about the need for reforms in the coroner system. In 1962, her stamina gave out, and she died, mourned by many.

Four years later, when the Department of Legal Medicine closed at Harvard, the Nutshells were transferred to the Office of the Medical Examiner in Baltimore, Maryland, and in 1992, a grant funded their restoration. Although one of the Nutshells is on display in the lobby, permission must be requested from the Office of the Chief Medical Examiner to see the others.

The Harvard Associates in Police Science continues to use some Nutshells in its teaching seminars. Although few people today, even in forensic science, know about Frances Glessner Lee, her legacy lives on in those who teach via diorama, and even in a series of *CSI* episodes that used miniature crime scenes as clues in a serial killer investigation. In an obituary, Lee's close friend, Erle Stanley Gardner, author of the *Perry Mason* series, wrote, "Captain Lee had a strong individuality, a unique, unforgettable character, was a fiercely competent fighter, and a practical idealist." Despite the hurdles she faced in this male-dominated arena, Lee found a niche and managed not only to achieve her childhood dream but also to make a difference.

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About the Author



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