

*The Poisoner's Handbook: Murder and the Birth of Forensic Medicine in Jazz Age New York.* Deborah Blum, Penguin Press, New York, 2010, 336 pp, ISBN 978-1-59420-243-8, \$25.95 hardcover, \$16.00 paper (978-0143118824).

*The Poisoner's Handbook* is about chemistry in history rather than history of chemistry. It is a rare example of a narrative that gives chemistry—or rather forensic science more broadly—as prominent a role in its pages as politics and law enforcement. The intersection of chemistry with history is what makes the book suitable for a review in the *Bulletin*. The topics of poison and murder allow it to tap into the broad audience for mystery fiction and true crime. And the interaction of forensic science with the legal system makes the book relevant to those interested in science and society and useful to those who wish to illustrate such connections. I recommend this book to readers attracted to any of the aforementioned topics. It is well written and, although aimed at a popular audience, well documented.

Deborah Blum brings her formidable story-telling skills to the topic of forensic science in New York city during the 1920s and 1930s. The book's overarching subject is the emergence of an effective and professional medical examiner's office in New York, largely through the efforts of chief medical examiner Charles Norris and forensic toxicologist Alexander Gettler. Blum, a Pulitzer Prize winning journalist who teaches science writing at the University of Wisconsin-Madison, constructs her narrative from building blocks of poison-related murders, suicides, and accidents. These incidents have the immediacy of scenes from crime fiction or reporting. They give the reader the sense that they were “ripped from the headlines” of their day, and indeed, Blum's notes are replete with references to accounts in contemporary newspapers.

The organization of the book is primarily chronological, although the chapters are named for toxic substances. In the table of contents, each chapter is designated by a name and formula; however, the heading at the start of each chapter also includes a time period of a year or two. At least one poisoning involving the title element or compound has a featured role in each chapter, but it would be misleading to say that the chapter is primarily “about” that material. In between “Chloroform ( $\text{CHCl}_3$ ), 1915” and “Thallium (Tl), 1935-1936,” cyanides, carbon monoxide, methyl alcohol, and more are featured—and, of course, arsenic.

The chapters may be named after chemicals, but the real protagonists are Norris and especially Gettler, both of whom are well characterized as individuals. Norris was the first professional medical examiner of New York city after state law and pressure from the governor abolished a system in which the coroner was a political appointee, often unqualified, of Tammany Hall. Norris is described principally as a dedicated and able administrator, but he continued to perform autopsies throughout his career. He was not afraid to write to the press or to complain to the mayor or other officials for the resources his office needed to do its job.

Gettler, the principal scientist in the story, was an extremely hard worker, combining his job as forensic toxicologist in the medical examiner's office with a pathology position at Bellevue Hospital and a faculty appointment at New York University. Blum describes several analytical procedures he developed to detect poisons in various tissues. She also explains experiments he conducted to determine how long certain toxins remained in tissue post-mortem and whether they could be produced by decomposition. Blum tells us that Gettler enjoyed gambling and cigars, but to reporters interested in his cases, he appeared to be dull. (In one contemporary account, he was said to have “a personality as colorless as the sodium chloride that he works with.”)

Prohibition has as pervasive a role in this tale as that of the principal actors, Gettler and Norris. The Eighteenth amendment of the US Constitution, which would prohibit making, selling, or transporting “intoxicating liquors” for “beverage purposes,” passed the Congress in December 1917, near the beginning of the period treated in the book. It was ratified in January 1919 and went into legal effect a year later. Until December 1933, Prohibition was the law of the land, albeit a law much ignored, despised, and circumvented. For this reason, ethyl alcohol gets a chapter in the book, including some discussion of its relatively low-grade toxicity. Methyl alcohol gets two chapters (one under the heading of wood alcohol) because of its widespread use as an adulterant of or substitute for ethyl alcohol. How bootleggers and owners of speakeasies filled the demand for intoxicating beverages with industrial denatured alcohol redistilled to a greater or (too often) lesser extent is a recurrent motif among the tales of poison in these pages.

Another important theme in the book, although more understated, is the *laissez faire* attitude toward public and occupational health and safety that prevailed at the time. Many supporters of Prohibition were unconcerned with

the public health consequences of adulterated liquor, because liquor was illegal. Acute poisoning by tetraethyl lead and chronic poisoning by radium are among the hazards faced by workers near New York and described by Blum. The household use of gas produced from coal and comprised mainly of carbon monoxide and hydrogen was apparently tolerated as a matter of course, despite the predictable tragic consequences of accident, suicide, or murder.

Chemists will notice occasional turns of phrase to remind them that the author is not a chemist. There are even rare lapses, such as calling DDT an organophosphate. But *The Poisoner's Handbook* is to be commended for illustrating how individuals like Gettler and Norris applied science to help the legal system hold murderers to account and protect the innocent and for communicating the hazards attendant on injudicious use of many materials.

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## **International Society for the Philosophy of Chemistry**

The International Society for the Philosophy of Chemistry—Summer symposium 2011, will be held during August 9-11, 2011, in Bogota, Colombia, at the campus of the Universidad de los Andes. The conference is being sponsored by the Universidad de los Andes (Colombia).

This event is the continuation of the International Society for the Philosophy of Chemistry—Summer symposium 2010, organised in Oxford at the University College during August 9-11, 2010.

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