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## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

### George Harley's Triple Threat: The A.C.E. of Anesthetic Mixtures



Many agents that rendered insensibility also promised transcendence, euphoria, even a touch of the sublime. Christened “*spiritus aethereus*” in 1730 by German mathematician F. G. Frobenius, ether, by its very name, evoked the heavens. One century later, neighbors of chloroform’s American co-discoverer, physician Samuel Guthrie, nicknamed his nectar-like substance “sweet whiskey.” After W. T. G. Morton’s 1846 demonstration, Americans exalted ether as the ace of anesthetics; however, the next year, Europeans deemed chloroform supreme. Although more cardiodepressive and arrhythmogenic than ether, chloroform afforded fragrant potency to achieve swift anesthetic depth. Nonetheless, rising deaths spurred the Royal Medico-Chirurgical (Surgical) Society of London to form an 1864 commission to examine chloroform’s physiological effects. A Scottish commissioner, physician George Harley, championed his A.C.E. mixture (*lower left*): a star-studded 1:2:3 ratio of alcohol (*upper middle*), chloroform (*upper left*), and ether (*upper right*). Combining the trio’s superlative properties—the (initial) stimulation of alcohol, the strength of chloroform, and the stability of ether—A.C.E. enjoyed first-rate popularity for decades to come. (Copyright © the American Society of Anesthesiologists’ Wood Library-Museum of Anesthesiology, Schaumburg, Illinois.)

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