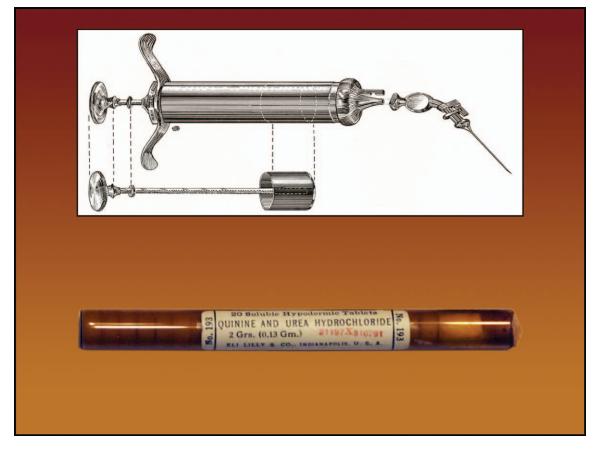
## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

Moynihan Syringe for Quinine and Urea Local Anesthesia



In his 1914 masterwork *Anoci-Association*, Cleveland surgeon George W. Crile, M.D. (1864 to 1943), depicted (*top*) the "Moynihan Syringe for the Infiltration of Quinin[e] and Urea Hydrochlorid[e]." His book was published seven years after the first publication about long-lasting local anesthesia and analgesia following injection of a mixture of quinine with urea. Manufactured by Eli Lilly & Company of Indianapolis, the glass tube (*bottom*) contained "20 soluble hypodermic tablets" with 2 grains or 0.13 grams of Quinine-Urea mixture. Although it was a long-acting local anesthetic and analgesic, the quinine-urea mixture could delay wound healing if directly injected into wound edges. And that is why Dr. Crile recommended use of a syringe with a long offset needle such as Moynihan's for infiltrating "*at a Distance* from the Incision." (Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology.)

George S. Bause, M.D., M.P.H., Honorary Curator, ASA's Wood Library-Museum of Anesthesiology, Schaumburg, Illinois, and Clinical Associate Professor, Case Western Reserve University, Cleveland, Ohio. UJYC@aol.com.