## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

## P. J. Flagg's Haemoxometer



Using the Munsell color system, New York anesthesiologist Paluel J. Flagg designed a fanning index of color cards in the early 1920s for visually estimating just how oxygenated ("O") or cyanosed ("C") a patient was. According to his color cards (from left to right above) blood under different degrees of oxygen saturation was represented on Card A: blood "seen directly"; Card B: "average mucous membrane, or edge of ear of plethoric patient"; Card C: "pale mucous membrane or edge of ear of average patient"; and Card D: "pale edge of ear, or average finger nail." Note that Dr. Flagg did not consider many issues, including ambient lighting in the operating room or color blindness in the anesthesiologist. (Copyright © the American Society of Anesthesiologists, Inc.)

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