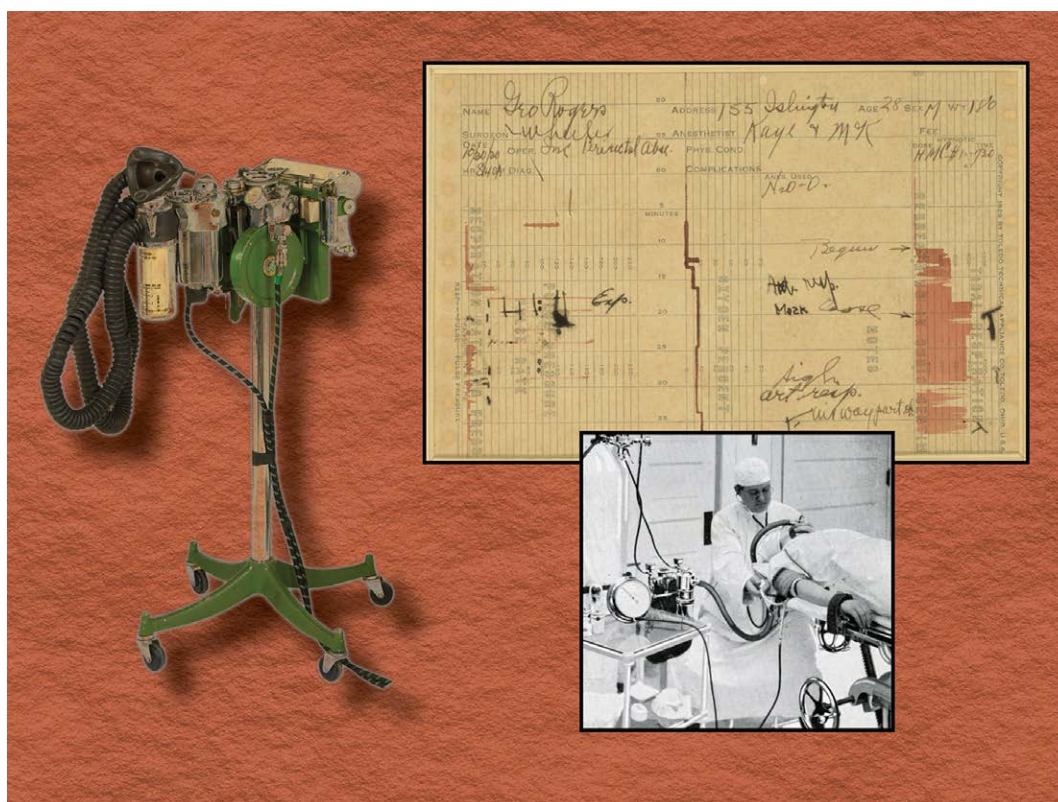


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## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

## Let the Record Show: McKesson's Automated Nargraf



A high school principal who became a physician, inventor, and entrepreneur, Elmer McKesson, M.D. (1881 to 1935, *lower right*), championed technology to optimize physiology under anesthesia. Enchanted by nitrous oxide anesthesia as an intern, he designed his first gas apparatus and founded his successful McKesson Appliance Company a few years later. He also served as the first President of the International Anesthesia Research Society. Truly ahead of his time, McKesson invented the first semiautomated anesthesia record when intraoperative blood pressure measurement was only beginning to gain favor. His revolutionary Nargraf Model J (1930, *left*) fed a preprinted paper record through a machine that charted blood pressure, tidal volume, oxygen concentration, and inspiratory gas pressure (*red ink, upper right*). The anesthetist would document the patient's heart rate and respiratory rate by hand (*black ink, upper right*). While fully automated records would not be in vogue until the twenty-first century, McKesson's Nargraf was a harbinger of things to come. (Image of record from the Geoffrey Kaye Museum of Anaesthetic History, VGKM5042. Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology.)

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