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ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

Future Nobelist Richard Wilstätter Synthesizes Tropacocaine: Raise a Cup of Java!



Dr. Carl Koller opened the medical community's eyes to the local anesthetic potential of cocaine in 1884. Cocaine's success as a topical and spinal anesthetic surged coca leaf exports, first from South America and then from Java, whose stimulating trade also included coffee. Although local anesthetic tropacocaine was present in higher concentrations in Javanese coca plants, future Nobelist Richard Wilstätter braved antisemitism and synthesized tropacocaine with "keto-tropins" in Munich. Thereby simpler to produce than cocaine, tropacocaine featured longer shelf life, quicker anesthetic onset, and fewer side effects. Wilstätter assigned his 1899 patent to E. Merck of Darmstadt, Germany (bottles above flanking Merck's wax cork seal, center). Although praised as an ophthalmic and spinal anesthetic, tropacocaine was saddled with shorter anesthetic duration and less vasoconstriction than its more addicting cousin, cocaine. However, none of the early cocaine derivatives or substitutes would match the lower toxicity and greater commercial success of addiction-free procaine or "Novocaine." (Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology.)

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