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Electrochemistry's Debt to Edgar Fahs Smith: PROFESSOR COLIN G. FINK

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ELECTROCHEMISTRY'S DEBT TO EDGAR FAHS SMITH¹

CATHODE FILM CONTROL IN ELECTROMETAL DEPOSITION

By Professor COLIN G. FINK

HEAD OF THE DIVISION OF ELECTROCHEMISTRY, COLUMBIA UNIVERSITY, NEW YORK CITY

THE outstanding and numerous contributions of Edgar Fahs Smith to chemistry and to learning in general cover a number of distinct fields of endeavor, each one of which would have completely occupied the time of a less gifted scientist than Dr. Smith. His publications alone number at least 200: organic syntheses, electrochemistry, atomic weight determinations, history of chemistry, mineralogy, biography, urinalysis, pedagogics, etc. But, as Professor Bogert pointed out at the memorial service for Dr. Smith seven years ago, the "most important contributions of Dr. Smith were those he made to electrochemistry, a domain in which he was a pioneer and soon became a recognized

leader of international reputation. In the hands of this master craftsman, the electric current became a tool of undreamed-of usefulness and possibilities, opening up wholly new methods of analysis, separation and determination. About half of all the research papers he published were based upon new applications of the electric current. His introduction of the rotating anode, together with the employment of currents of high amperage and high voltage, marked a new epoch in the development of electroanalysis. His books on electrochemistry quickly became and have since remained the standard texts in this country, while the Harrison Laboratory was soon known throughout the world for its leadership in this branch of chemistry." Out of 169 papers published in various scientific journals every second one deals with an

¹ Edgar Fahs Smith Memorial Address, slightly curtailed, given on May 23, 1935, at the University of Pennsylvania, Professor Hiram Lukens in the chair.

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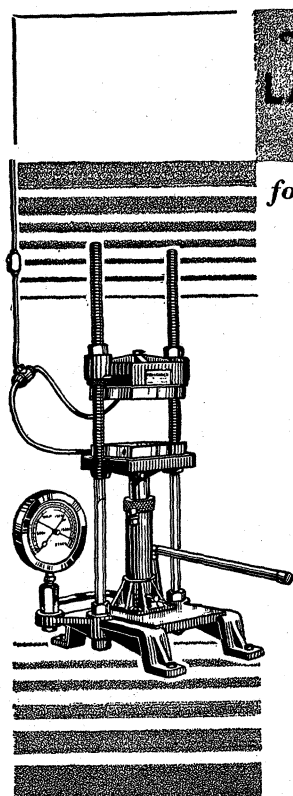
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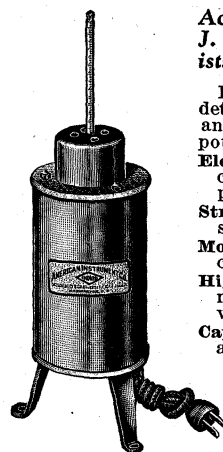
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