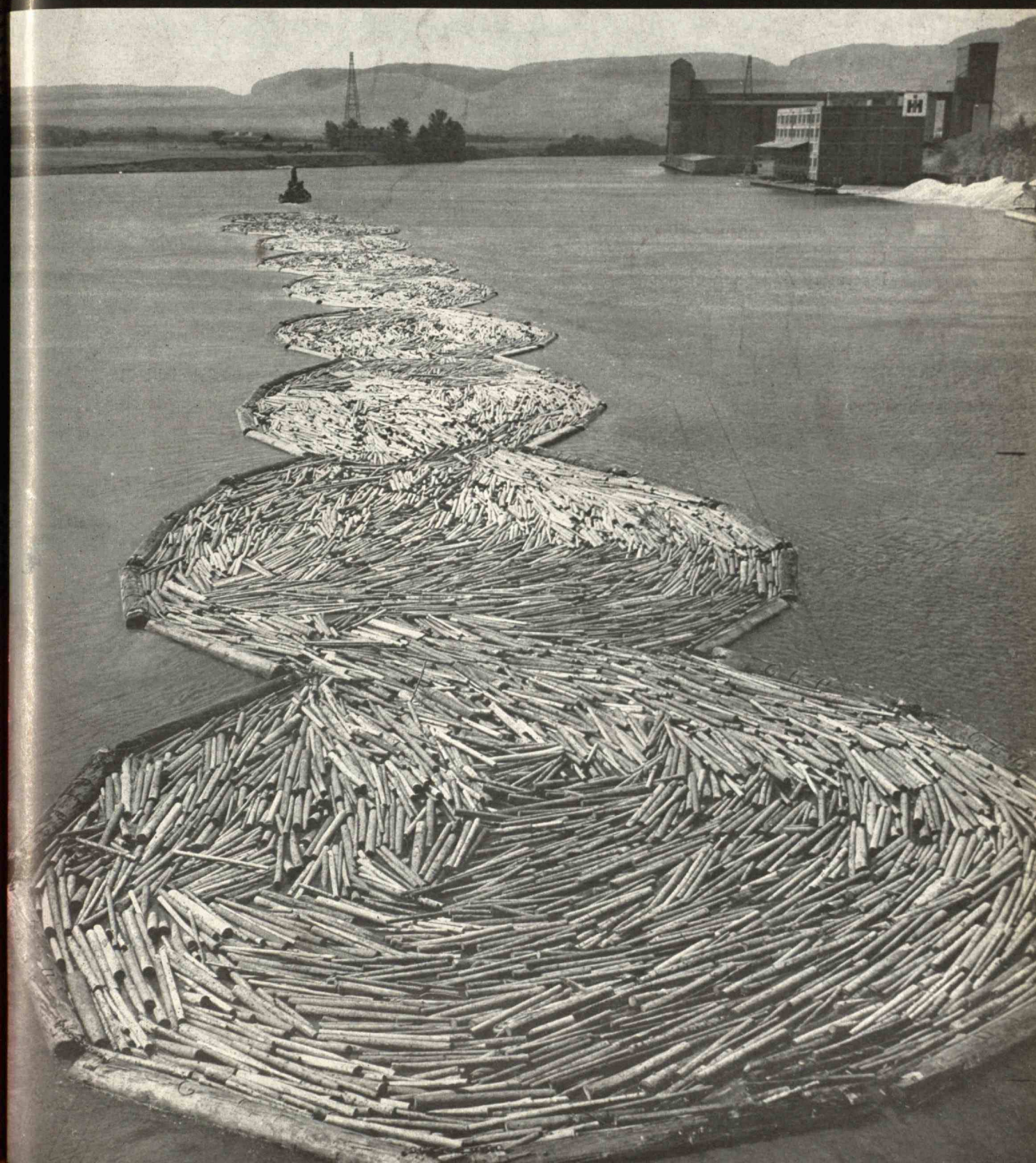


TECHNOLOGY

REVIEW *June* 1953



pioneers in precision

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a Division of Cook Electric Company have conducted atmospheric studies which have resulted in a workable design of data processing equipment, using the new form of universal records developed by this post-war pioneer in laboratory testing techniques.

Miniature Precision Bearings

incorporated, are the originators and pioneer developers of radial ball bearings in miniature sizes. More than twenty years ago, **MPB** engineers developed the first miniature radial ball bearings with ground races. From an original group of five ball bearings, **MPB** has developed a comprehensive line of more than 130 types and sizes, many of which now form the basis for international standardization.

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The wealth of engineering knowledge gained through participation in more than a million applications is available. Call on us for assistance, also request new catalog 53 and supplementary data sheets TR6.

Because of recent plant expansion, our facilities permit us to schedule prompt delivery of most sizes. We would welcome the opportunity to quote on your specific requirements.

Miniature precision Bearings

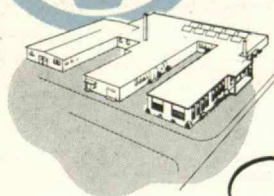
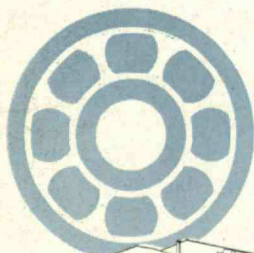
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Keene, New Hampshire

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space
weight
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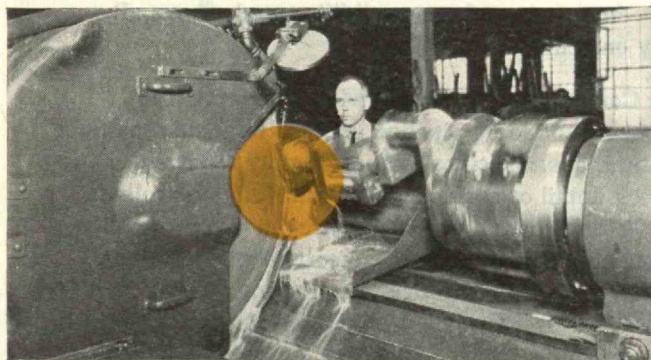


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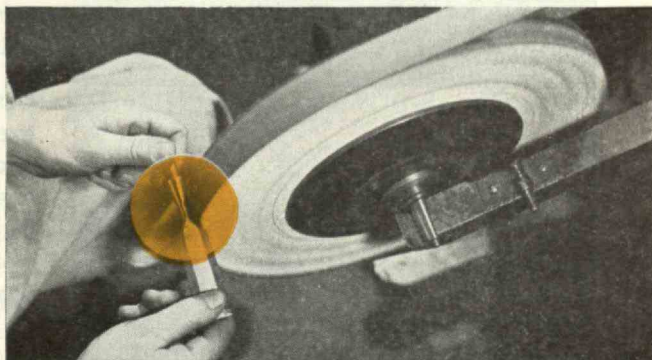
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A "Touch of Gold." A new G Bond Norton Wheel on a Norton Crankpin Grinder finishing a giant diesel locomotive crankshaft ... gives the operator the "Touch of Gold."



A "Touch of Gold." Behr-Manning's RESINIZED[®] METALITE[®] Cloth Belt is being used to polish contours on wood chisels. Fast, smooth, profitable ... gives workers the "Touch of Gold."

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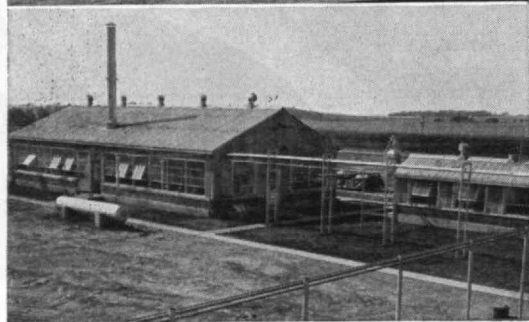
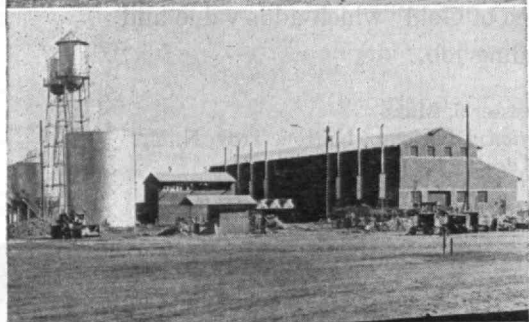
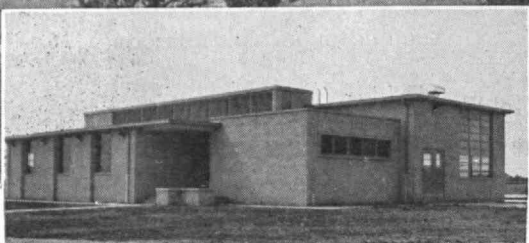
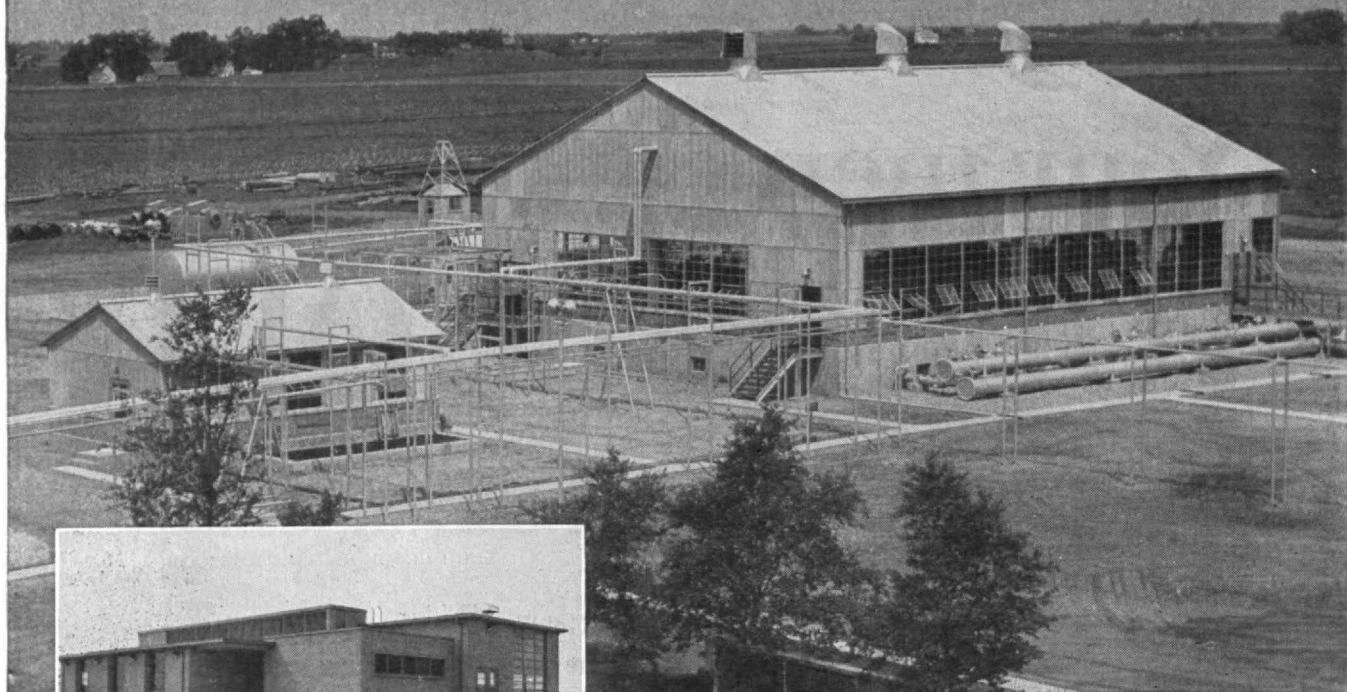


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BEHR-MANNING

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KPIX
INC.

VAN NESS AVENUE AT GREENWICH STREET
SAN FRANCISCO 9, CALIFORNIA

TELEVISION
CHANNEL 5

March 4, 1953

Phelps-Dodge Copper Products Company
40 Wall Street
New York, New York

Gentlemen:

The Styroflex co-axial cable installation at KPIX has proven its worth to us. As you know, where even short outages occur, both maintenance headaches and loss in station revenue are the results.

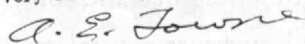
We at Television Station KPIX are certain your cable will be as free from leaks or junction difficulties in the future as it is today.

Engineers should be especially interested to know that an over-all standing wave ratio of 1.02 was obtained on Channel 5. Only five pounds of dry air pressure was used.

It is my belief that Styroflex cable will find many applications because of its ease of rapid installation. It seems within the realm of actuality to use this cable for powers of several hundred kilowatts, replacing certain open wire transmission lines.

I am personally convinced that Styroflex co-ax has a real and important future.

Very sincerely,



A. E. Towme
Director of Engineering
KPIX, KSFO, KWID

AET/bh

AFFILIATED WITH CBS TELEVISION NETWORK

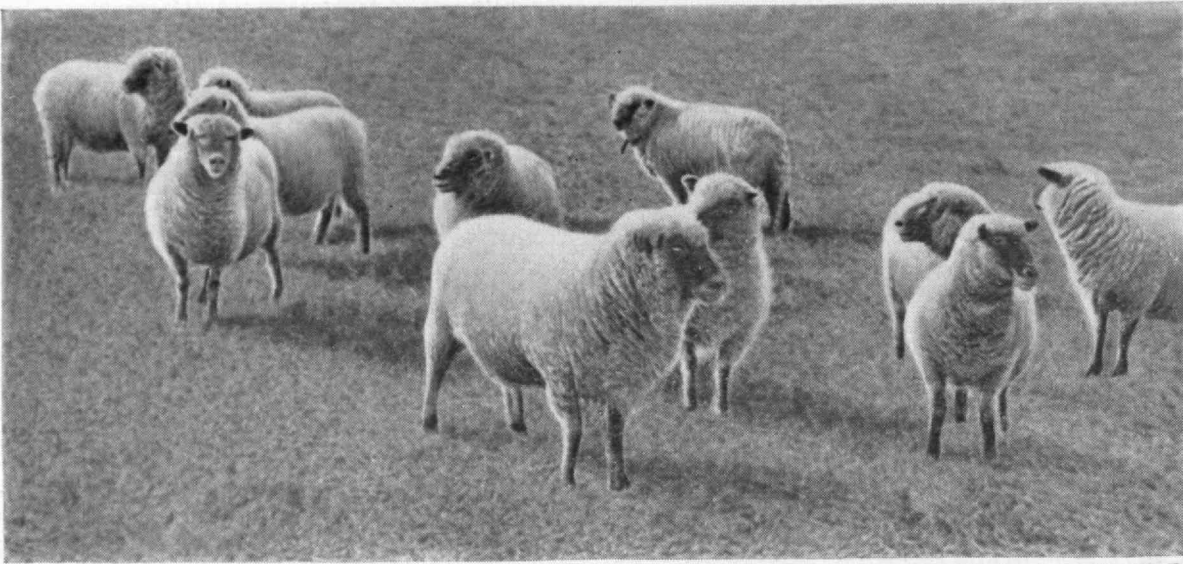
• The properties of this cable can help reduce your operating costs.
Our engineering, production and application experiences are at your service.



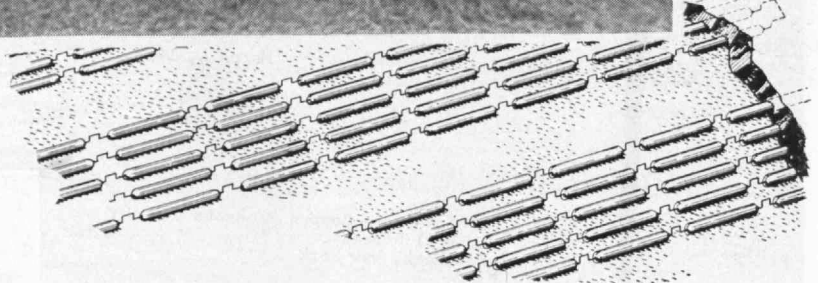
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Picture of a NATURAL GAS STORAGE FIELD

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For the Washington Gas Light Company the Engineering Corporation designed and constructed underground high pressure natural gas storage facilities with propane storing and

mixing equipment, giving the Company, in addition to its other facilities, the equivalent of 100 million cubic feet of gas available for stand-by and peak shaving.

The new Washington Gas Light Company storage field is one of a number of high pressure pipe gas storage fields that Stone & Webster Engineering Corporation has designed and built for its clients.

The Corporation has also designed and built gas compressor stations, and has made studies for clients on peak shaving problems involving catalytic reforming of hydrocarbons, natural gas liquefaction and other processes. This broad experience is available to the gas industry.



STONE & WEBSTER ENGINEERING CORPORATION
BADGER PROCESS DIVISION
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Functional Schools



Clyde L. Lyon School, Glenview, Illinois. Walvector in special enclosures along entire walls of windows assures comfort regardless of outside temperatures. Photo by Hedrich-Blessing.

Perkins and Will, nationally known Architects and Engineers, specify "perimeter" heating for comfort and economy

Many schools designed by this Chicago firm feature large glass areas, for beauty, better vision and more cheerful classrooms. To off-set resulting heating problems, the consulting engineers, E. R. Gritschke and Associates, have specified Webster Walvector Tru-Perimeter Heating for comfort and economy in many of the Perkins and Will schools.

Webster Walvector gently and evenly warms the exposed walls of the building. Heating-up is quick, and easily controlled. Buildings can be heated just before occupancy and the heat lowered as soon as they are empty. No blowers, fans or filters are used. Webster Walvector uses less piping than conventional radiator systems. There's no expense to conceal unsightly pipes in furred walls or trenches, no complicated run-outs.

Webster Walvector may be used in new construction or modernization with forced hot water or low pressure steam. See the Webster Representative for complete details, or write us.

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WALVECTOR

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For Steam or Hot Water Heating

Left below: Teacher's lounge in Technical Building, Evanston Township High School, Evanston, Illinois. The exposed walls are heated with Webster Walvector painted to match wall color. Photo by Hedrich-Blessing.

Right: Library in Cascades Elementary School, Jackson, Michigan. Auditorium and gymnasium, in separate wings, are available for community use without opening the school proper.



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THE TABULAR VIEW

Industrial Management. — As its first full year of operation draws to a close, E. P. Brooks, '17, Dean of the School of Industrial Management, reviews the hopes, objectives, and accomplishments of the Institute's newest school (page 419). In establishing the School of Industrial Management, Dean Brooks and his associates have aimed to develop future leaders of industry who have a good basic background in science and engineering. Dean Brooks is a graduate of the Institute's Course in Business and Engineering Administration which now forms part of the new School. He has had a distinguished career in business, holding executive positions with American Cotton Oil Company, Montgomery Ward and Company, United States Steel Corporation, and serving Sears Roebuck and Company for a quarter of a century. From 1938 to 1951 he was vice-president in charge of factories, and from 1941 to 1952 was a director of the Chicago mail order firm. From 1949 to 1951, Dean Brooks was chairman of the Committee on Equipment and Materials, National Research and Development Board, and in 1945 was vice-deputy in charge of the American Mission to China for the War Production Board.

Nuisance Electricity. — In the May issue of The Review an article on the "History of Static Electricity" by SIDNEY M. EDELSTEIN, '32, developed the principal points of progress in early electrical science. Mr. Edelstein concludes his two-part article with a discussion of the role of static electricity in the textile industry, and methods which are being used to combat its annoying characteristics (page 425). That there are problems worthy of any engineer's attention will become evident by Mr. Edelstein's recital of devices which have been used in the past to eliminate static. Mr. Edelstein is technical director of the Dexter Chemical Corporation. He has an extensive personal collection of great works, documents, and letters in the history of science, which has been put to good use in the past few years, in his position as secretary for the Division of History of Chemistry of the American Chemical Society.

Mechanical Resurgence. — The resurgence now taking place in nearly all branches of mechanical engineering is reflected in undergraduate training in this profession. In this issue (page 429) C. RICHARD SODERBERG, '20, Professor of Mechanical Engineering, emphasizes the ways in which an extended program of graduate study, intensive research on problems of real value, and close contact with leaders in industry all act to benefit the undergraduate curriculum in Mechanical Engineering at the Institute. Professor Soderberg was graduated from Sweden's Chalmers Institute of Technology in 1919, and received the honorary degree of doctor of technology from that institution in 1951. He also received the B.S. degree from M.I.T. in 1920. After nearly two decades of engineering work in industry, Professor Soderberg returned to the Institute in 1938 as a member of the Department of Mechanical Engineering. He became head of that Department in 1947.

(Concluded on page 410)