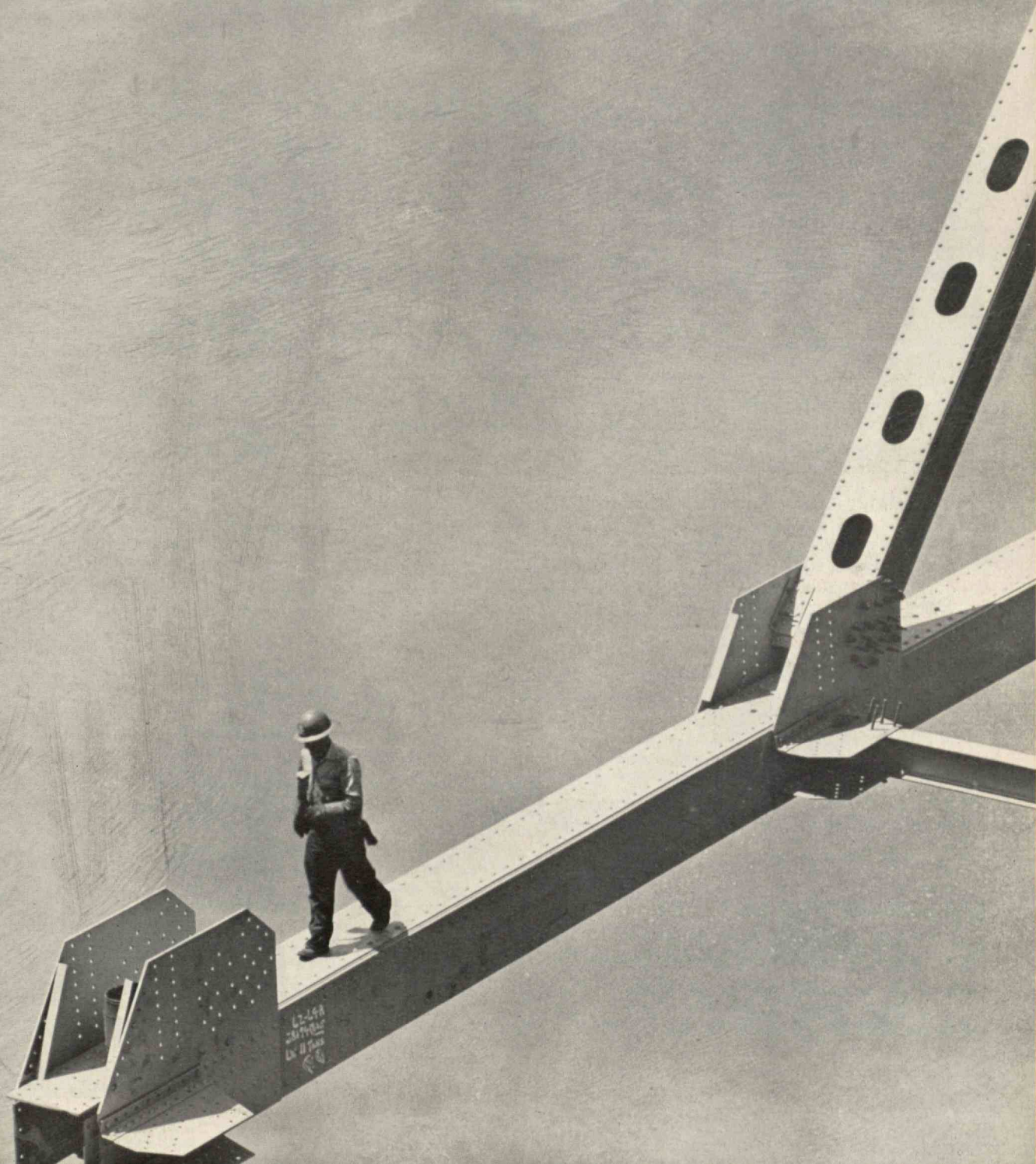


TECHNOLOGY

REVIEW

June

1952



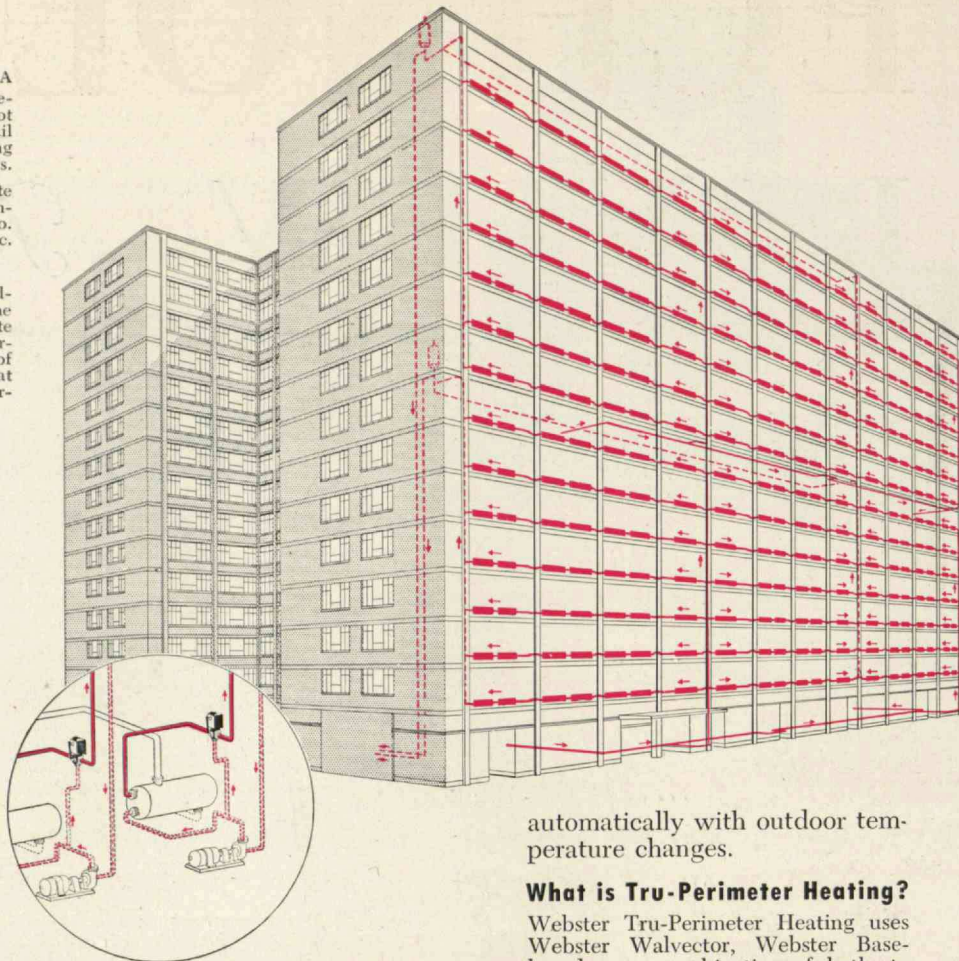
FLAMINGO APARTMENTS
1220 N. BROAD ST., PHILADELPHIA

Diagrammatic view showing piping arrangement for Webster Tru-Perimeter forced hot water heating. Inset shows basement detail with heat exchangers, pumps and mixing valves for Webster Continuous Flow Controls.

Architect: John H. Graham, A.I.A. Associate
Architect: Sweet and Schwartz, A.I.A. General Contractor: Turner Construction Co.
Heating Contractor: Benjamin Lessner Co., Inc.

MECHANICAL DESIGN NOTES

Only four risers across entire front of building. Two-zones—one serving floors 2 to 8, the other floors 9 to 15, each with separate Webster CF-2 Control and Outdoor Thermostat. Each zone vented to tank at top of zone—no individual room vents. Two heat exchangers and circulating pumps all interconnected.



Perimeter Heating

For 15-Story Flamingo Apartment Building

Webster Tru-Perimeter Heating with series-connected Webster Walvector and Webster-controlled continuous flow hot water heat provided the designers of this ultra-modern building with comfort heating and attractive interiors without sacrifice of many novel building construction features contributing to low cost. Consider these features:

- (1) Economy construction. No hung ceiling, no furred columns to conceal piping.

- (2) Supply and return risers concealed in partitions at convenient column locations; less than half the risers required in conventional piping.

- (3) All connections concealed in continuous Walvector enclosures (see photo), customary runouts completely eliminated.

- (4) Neat, attractive, out of the way, matches modern architectural style.

- (5) Continuous draft-free, mild heat blanketing the almost all-glass exposure. Water temperature varied

automatically with outdoor temperature changes.

What is Tru-Perimeter Heating?

Webster Tru-Perimeter Heating uses Webster Walvector, Webster Baseboard, or a combination of both, to replace the heat at the perimeter where heat loss occurs. Heating elements are mounted close to the floor along outside walls, spreading the heat the entire length of the exposed walls.

Webster Tru-Perimeter Heating warms the air within a room, warms the floors and warms the inside surface of outside walls where a normal coolness occurs during winter months. Gently moving warm air is drawn to floor level and across the floor into the inlet opening of the radiation. Radiant heat rays strike the floor along the full length of the exposed wall. Floors are warm and comfortable even with slab floor construction.

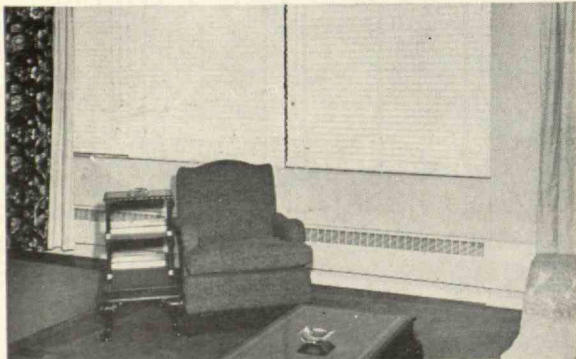
Webster Tru-Perimeter results are obtainable with either forced hot water or Moderator controlled low pressure steam heating. For further information about Webster Tru-Perimeter Heating for a new building or modernization see your Webster representative or write us.

Address Dept. TR-6

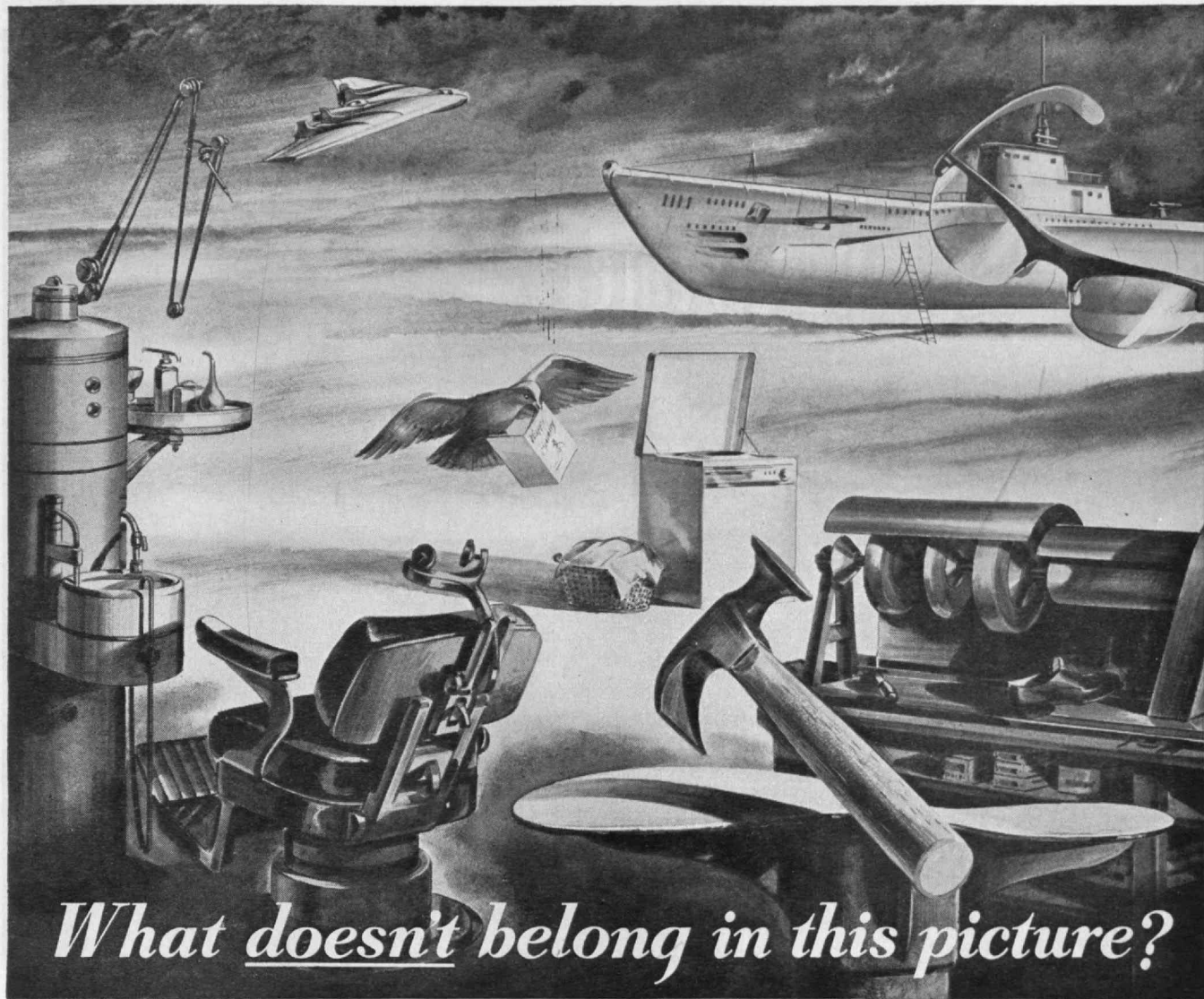
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In Canada, Darling Brothers, Limited, Montreal

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WALVECTOR
REG. U. S. PAT. OFF.
For Steam or Hot Water Heating



Living room in typical apartment showing Webster Walvector.



What doesn't belong in this picture?

All but one of the objects in this picture have something in common. They were affected directly or indirectly by the kind of products Norton and Behr-Manning make. *Can you find the stranger?*

The Shoe Repair Equipment? No! Many operations in a shoe repair shop depend on Norton and Behr-Manning abrasive products. Behr-Manning coated abrasives, for instance, are used to shape and finish heels and soles.

The Submarine? No! Hundreds of its parts depend on Norton or Behr-Manning products. Its camshafts are just one of the many diesel motor parts precision ground by Norton grinding machines and abrasive wheels.

The Greeting Card? No! Norton or Behr-Manning abrasive products are vitally important in manufactur-

ing both paper and printing presses.

Neither Is It the flying wing, the eyeglasses, the washing machine, nor the dentist's equipment.

The stranger in the picture is the bird, which does not rely on man-made products. Remember, any man-made product . . . whether of metal, wood, paper, cloth, leather, ceramics, or plastics . . . depends on abrasives, abrasive products, refractories, or grinding machines that bear such well-known trade-marks as Norton and Behr-Manning . . . world's largest manufacturers of abrasives and abrasive products.



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NORTON COMPANY

MAIN OFFICE AND WORKS
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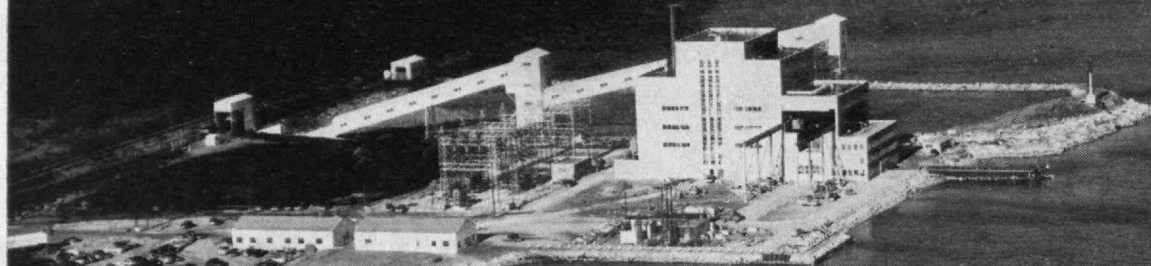
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NORBIDE GRAIN AND MOLDED PRODUCTS
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BEHR-MANNING

DIVISION OF NORTON COMPANY
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ABRASIVE SPECIALTIES
BEHR-CAT BRAND PRESSURE-SENSITIVE TAPES

Danskammer



"De Duyfels Dans Kammer!" cried one of Henry Hudson's crew as the little Half Moon rounded a bend in the river and approached a large, flat rock on which a band of Indians were holding a ceremonial war dance around a huge fire. It must, indeed, have seemed a "Devil's Dance Chamber"... and it is still called that today... Danskammer.

Last December flames flared again at the Devil's Dance Chamber when a large C-E Boiler was lighted off at the new Danskammer Point power plant of the Central Hudson Gas & Electric Corporation. If Henry Hudson's crew could have looked in on that scene, what a fire they would have witnessed—masses of flames, at temperatures as high as 3000° F., spiralling up through a furnace more than seven stories high.

The starting up of Danskammer was an event of special significance to Combustion Engineering—Superheater because it marked the completion of the Company's 1951 work in so far as new utility power stations were concerned. It was the last of nine new stations equipped with C-E Boilers to go into service during the year. The aggregate capacity of these stations, if used only for residential service, would meet the needs of more than fifteen million people. And this is only part of the story, for many more C-E Boilers were installed in 1951 in existing utility stations than in new plants.

C-E Boilers, reflecting the high standards required by modern utility practice, are also available in types and sizes suitable for virtually all heating and industrial requirements.

New Power Stations, C-E Equipped, placed in service in 1951

Titus Station, Metropolitan Edison Company
Lee Station, Duke Power Company
Contra Costa Steam Plant, Pacific Gas and Electric Company
Hawthorn Station,
Kansas City Power & Light Company
Ninemile Point Station,
Louisiana Power & Light Company
Edge Moor Station,
Delaware Power & Light Company
Palatka Station,
Florida Power & Light Company
Johnsonville Station,
Tennessee Valley Authority
Danskammer Point Station,
Central Hudson Gas & Electric Corporation

B-564

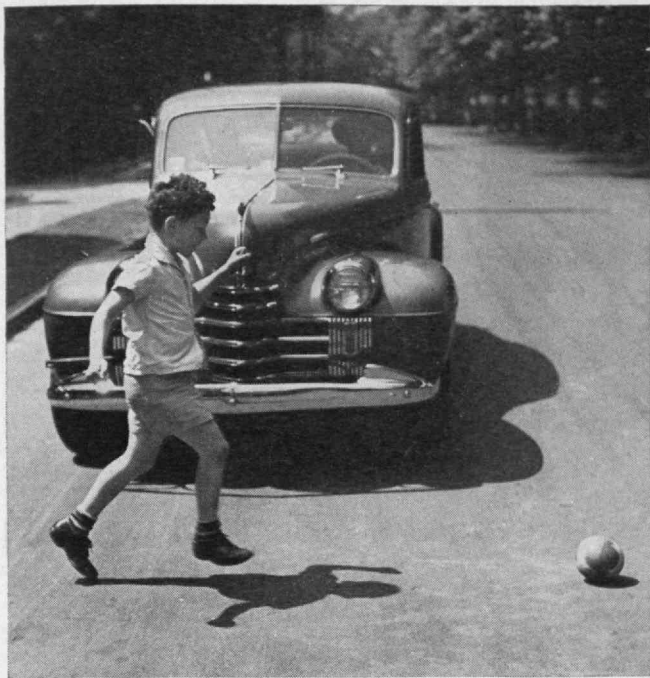
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Combustion Engineering Building • 200 Madison Avenue, New York 16, N. Y.

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PREVENTION OF SPOILAGE in refrigeration applications can be assured for little cost. In the Jewett Hospital Blood Bank, for example, the temperature is maintained at 37° within plus or minus 2 degrees. Two inexpensive Fenwal THERMOSWITCH thermostats serve as an alarm signal, warning instantly against freezing or refrigeration failure if temperature goes below 32° F or above 48° F.



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SEND FOR THIS CATALOG for complete explanation of the unique THERMOSWITCH unit. Also ask for more detailed, illustrated discussions of the problems above. Fenwal engineers will be glad to help you solve your temperature control problems involving heat, humidity, radiant heat, pressure and other variables. Write Fenwal, Incorporated, 96 Pleasant Street, Ashland, Massachusetts.



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RADAR—
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COMPUTER DEVELOPMENT AND DESIGN—
Digital and Analog Computers, Magnetic Recording, Pulse Circuitry, Storage Components, Systems Design

NAVIGATIONAL AIDS

TECHNICAL SALES

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MAIL RESUMÉ

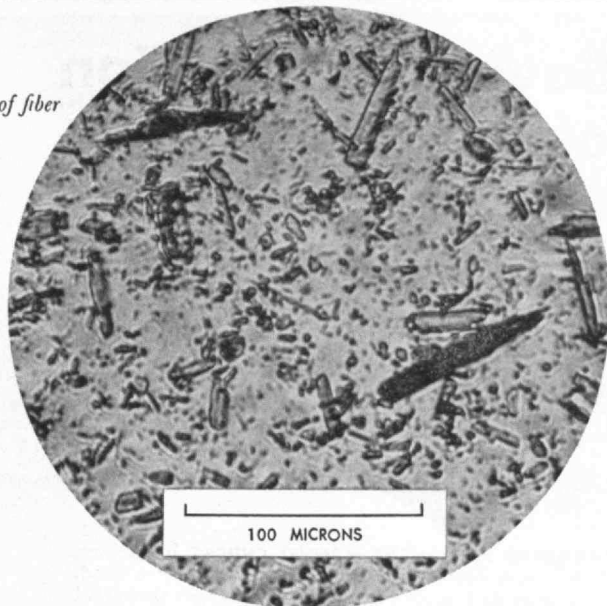
If you qualify for any of the positions listed above, send us a complete resumé of your education and experience, also state your specialized field preference. Send resumé to:

MR. ROBERT E. McQUISTON,
Specialized Employment Division, Dept. 142F
Radio Corporation of America,
30 Rockefeller Plaza,
New York 20, N. Y.



RADIO CORPORATION of AMERICA

The photographs show the range of fiber length obtainable in wollastonite.



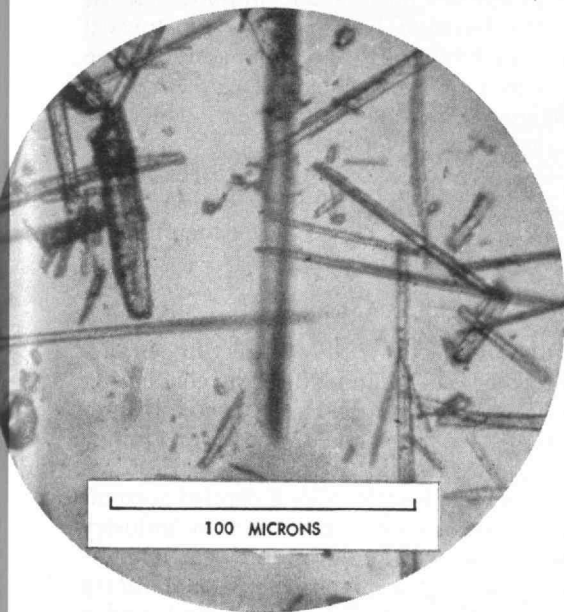
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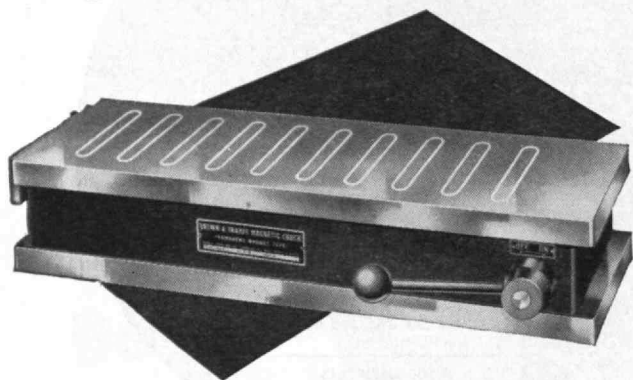
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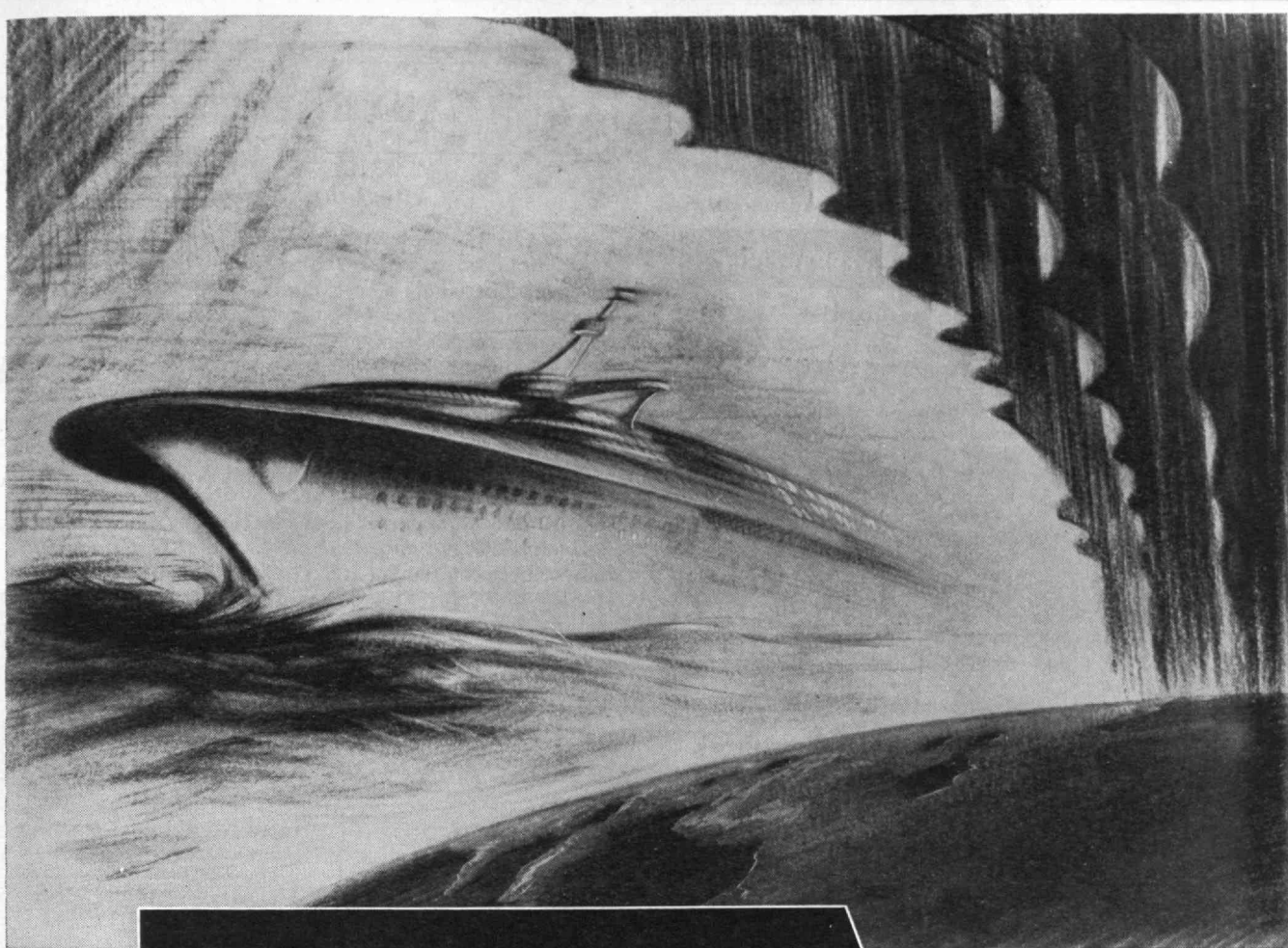
DIEFENDORF
G E A R S

THE TABULAR VIEW

Killian's Millions. — On May 3, 1951, more than 1,000 leading industrialists, educators, and distinguished representatives of the professions gathered at the Waldorf-Astoria Hotel in New York to attend a victory dinner marking the successful completion of the \$20,000,000 campaign of the Institute's Development Program. Precisely a year later — with \$25,668,532 in the safe custody of Joseph J. Snyder, 2-44, Treasurer — JAMES R. KILLIAN, JR., '26, President, reviews the benefits planned, or already accomplished, as a result of the effective financial assistance which the Institute has received through Alumni, corporations, trusts, and its many loyal friends. President Killian's report to Technology Alumni (page 407) gives ample assurance that "Killian's Millions" have been wisely employed to widen the scope and strengthen the resources of M.I.T. The Institute's educational program has been strengthened, new co-operative relationships have been opened up with industry, additional buildings and facilities have enabled M.I.T. to embark on new and important fields of research, the Institute has made strides toward becoming a residential college, the humanities have been elevated to a fourth School, a fifth School has been brought into being, and cultural activities have been encouraged as never before. The changes wrought at Technology because of the Development Program may well make any Alumnus proud of the auspicious leadership which has been manifest so early in the presidency of Dr. Killian.

Bunker Hill's Quarry Mill. — Eleven decades ago this month, Charlestown celebrated the completion of the Bunker Hill Monument. In the concluding portion of a two-part article, E. H. CAMERON, '13, relates (page 419) how the Yankee granite of Quincy supplied the gray stone blocks for the Charlestown shrine. Mr. Cameron also provides a careful account of progress in the American construction industry when the monument was being built. A vast experience in civil engineering, an extensive personal library on engineering in the post-Civil War period, and a decade as head of the Technical Publications Division of Jackson and Moreland, consulting engineers, enable Mr. Cameron to write with authority.

Seward's Steward. — Co-operation on an international basis is not as new as myopic isolationists might prefer to believe. Indeed, in the Civil War period, Secretary Seward greatly encouraged international cooperation on monetary matters and sent Samuel B. Ruggles to Europe for this purpose, as D. G. BRINTON THOMPSON, '23, reminds us (page 423). Professor Thompson received the A.B. degree from the University of Pennsylvania in 1920, the S.B. degree from M.I.T. in 1923, and the Ph.D. degree from Columbia University in 1945. Between 1924 and 1941 he was in industry, and taught at Lafayette College from 1943 to 1945. Since 1945 he has been at Trinity College, in Hartford, where he is Northam professor of history and chairman of the department.



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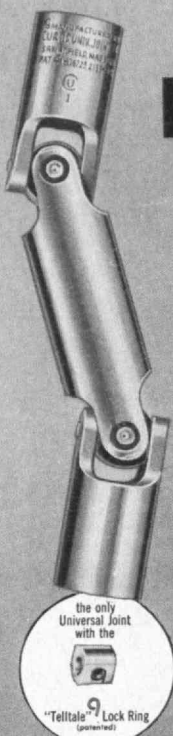
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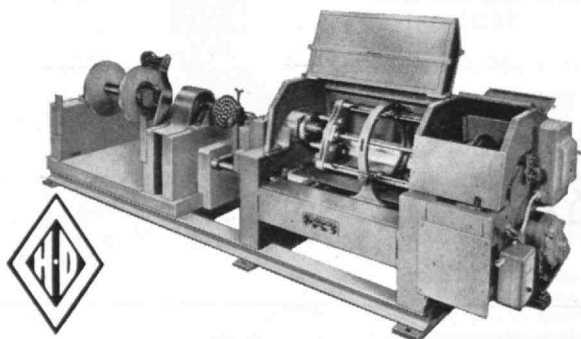
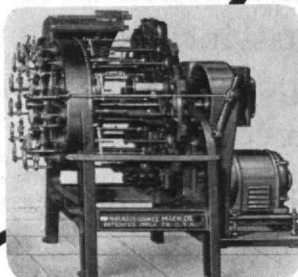
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MAIL RETURNS

The John Mason

FROM J. NEWELL STEPHENSON, '09:

Mr. Brainerd's article, "Stepbrother to the Iron Horse," which appeared in the March, 1952, issue of The Review, interested me very much. My grandfather, John Stephenson, made that first streetcar. It was called the *John Mason* and, according to the centenary program on the radio in 1932, ran cross-town on 34th Street. He made the first cable cars in New York. He also made coaches, busses, and some railway coaches.

I have grandfather's indenture as a carriage-maker's apprentice. He had his own shop by 1832. His letterhead showed the car on page 241 of The Review.

Hector Clergue once told me the story of the electric railway between Bangor and Veazie, Maine, in the 1880's. It used direct current and cars often stalled on the hill for lack of power until other cars stopped. There were frequent and serious breaks in the water line across the river to Brewer. A professor from Philadelphia found that current leakage from the power plant, which was near the pipe line, was causing electrolytic corrosion. Clergue said this was the discovery of that phenomenon.

Gardenvale, Quebec

Blow, Wind!

FROM VIKING ENEBUSKE, '15:

Having climbed the Bunker Hill Monument twice, once before I went to Tech and the last time in 1947, I was especially interested in the article "Of Yankee Granite," by E. H. Cameron (May, 1952, Review), and made some calculations of my own, based entirely upon information in The Review, and arrived at a soil pressure of 4.8 tons per square foot, which is within 4 per cent of the figure the author quoted. The thickness of walls and the interior I guessed at for the top and mid-sections.

It is self-evident that the Bunker Hill Monument could only tip over due to soil settlement, even if a hurricane exceeded wind pressures allowed by the Boston Building Code.

Boston, Mass.



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