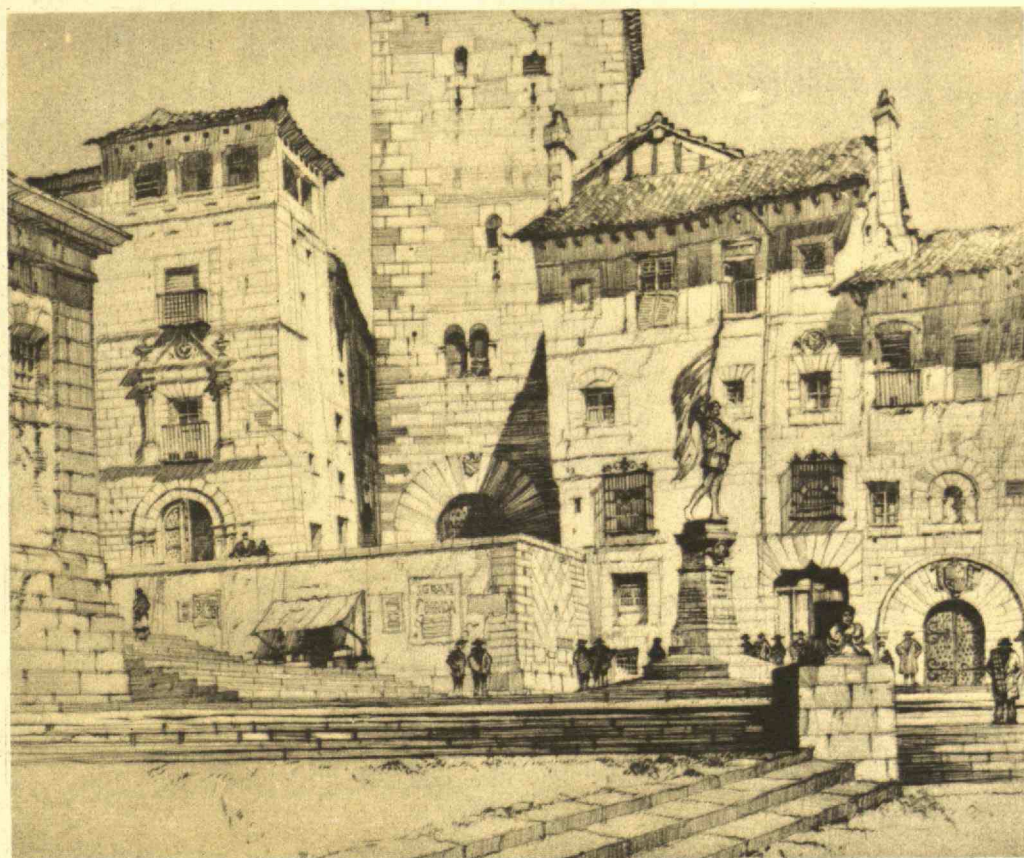
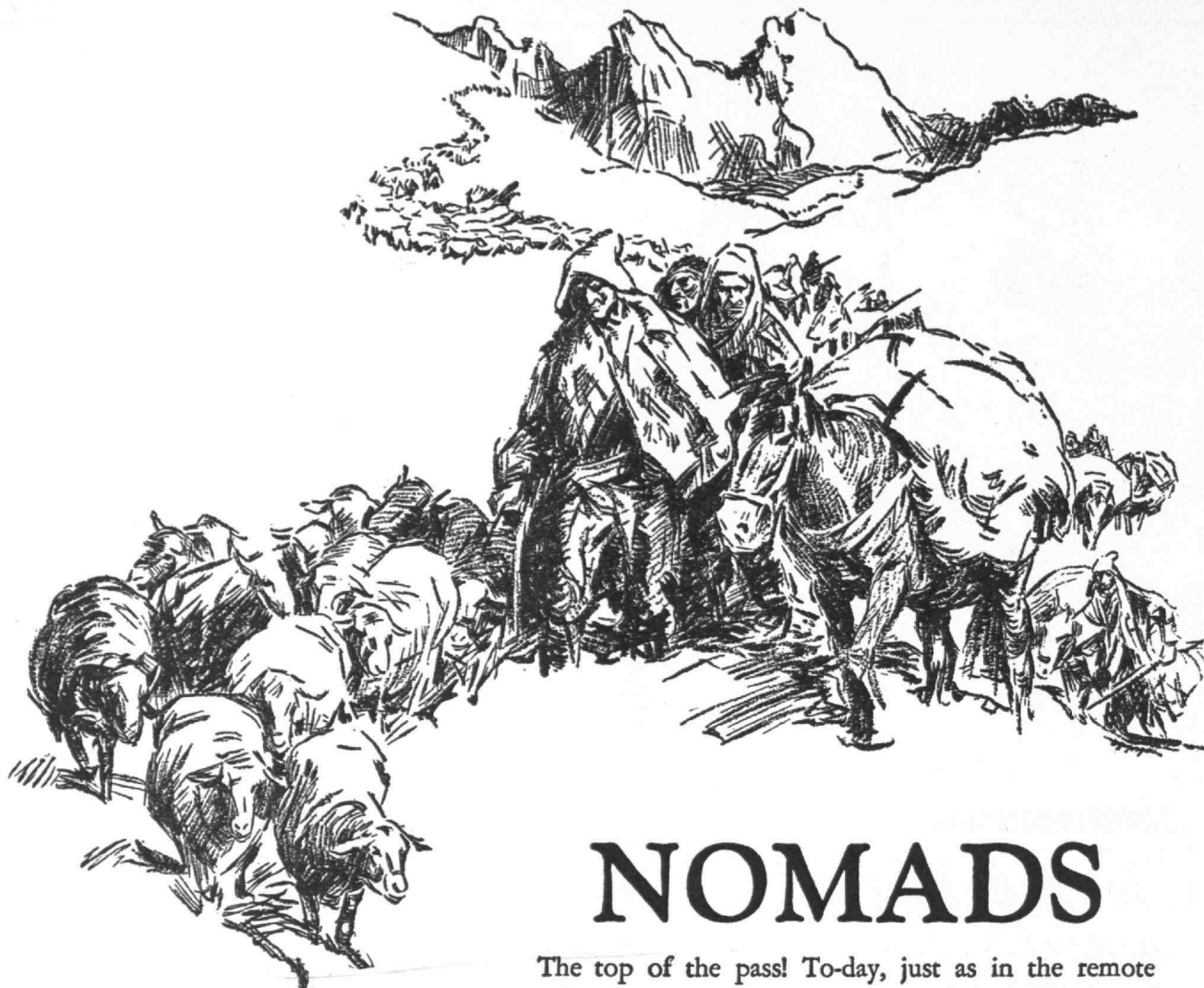


THE TECHNOLOGY REVIEW



RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY
NOVEMBER • • • 1928



NOMADS

The top of the pass! To-day, just as in the remote Biblical age when herdsmen tended the flocks of Abraham, these nomad tribes drive their flocks each season up from the parched desert to the high tablelands of the Caucasus, green with life-giving grass.

We moderns of the West make no such forced marches in search of food. In our lands of little rain, electricity pumps water to make the desert bloom. Electricity lights the herdsman's home and milks the cows in his stable. Electricity powers the great network of transportation and communication which binds city and country into one complex system of civilized living.

Yet, as Thomas A. Edison has written, "The electrical development of America has only well begun. So long as there remains a single task being done by men and women which electricity could do as well, so long will that development be incomplete."



This monogram appears on a multitude of products which contribute to the efficiency and comfort of both factory and home. It is your assurance of electrical correctness and dependability.

95-475H

GENERAL ELECTRIC

UNION DEPOT BRIDGE AND TERMINAL RAILROAD CO.
NORTH KANSAS CITY DEVELOPMENT COMPANY
OFFICE OF CHIEF ENGINEER
COMMERCIAL BLDG.
NORTH KANSAS CITY, Mo. June 30, 1926



The Goheen Corporation,
Newark, New Jersey
Gentlemen:

We are pleased to advise that we have recently inspected our North Kansas City Bridge over the Missouri River at Kansas City, Mo.

This bridge was painted with your CARBONIZING COATING in 1912. After 14 years of service, your CARBONIZING COATING is on the whole in good condition, and we consider same a satisfactory steel preservative.

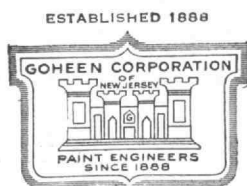
We are keeping up painting maintenance on the bridge, using a nominal amount of paint each year, and do not anticipate it will be necessary to paint the entire structure for another four or five years. We are pleased to advise that we feel that this CARBONIZING COATING has given us excellent service, and is worthy of special mention.

Yours very truly,
W. H. Fitch
Chief Engineer.

To get this same service —
specify and insist on getting
CARBONIZING COATING
TRADE MARK
A paint for all Iron and
Steel Structures !

Most iron and steel structures don't wear out, they *rust out* — corrode, deteriorate, fall apart due to the conditions about them. These surfaces represent big investments. They deserve the best protection that can be given them.

This protection is not secured by using ordinary paints. A paint compounded to resist and inhibit the common destructive elements is needed, and *Carbonizing Coating* is such a paint. Under similar conditions it will give from 2 to 3 times the protective life of ordinary paint.



Make This Simple Convincing Test:

Take any iron or steel surface that needs repainting. Paint half of it with ordinary paint, and the other half with *Carbonizing Coating*. Keep careful check on the result — then, you too, will be glad to write us 7 years or more from now as did the user whose letter is reproduced above.

Color cards, list of users, a quotation, or any other data you may desire are yours for the asking. Write today!

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THE HYDRAULIC MANUFACTURING **PRESS COMPANY**
OF COLUMBUS, OHIO AT TWENTY EAST BROAD

November 1, 1928.

Dear Alumni:

Power production is of course a subject of primary interest to all of us in industrial work, at least as users of power if not also as producers.

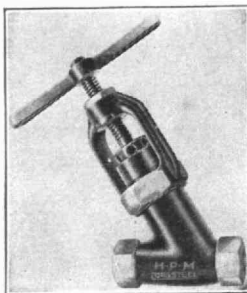
Power plant construction and operation are undergoing a real reformation these days. Every move points towards greater economy. One phase of the trend is towards higher steam pressures and temperatures, particularly in central power stations.

This new duty calls for new qualities in pipe line equipment. Our company is very naturally equipped to meet these new requirements for heavy duty valves and fittings, due to our long and varied experience in other high-pressure work.

Pipe fittings machined out of solid steel forgings which work at hydrostatic pressures from 3000 pounds up to 10,000 or even 15,000 pounds, are ideal for any high steam pressure in commercial use. We produce such fittings in all regular types and sizes. They are used for all other severe duties such as hot oil piping in cracking stills.

The H-P-M FORGSTEEL Valve, shown in the accompanying photo, completes the line for super pressure and temperature piping. In its design special attention has been given to equal expansion of parts and ample heat radiation from the stem. The trim (seat, disc, stem, etc.) is "Stainless" steel and is renewable.

Let us have a crack at your high-pressure piping problems. Write me now for data on H-P-M FORGSTEEL Valves and Fittings.



Yours for Tech.

Howard F. MacMillin II-21.

Howard F. MacMillin,
Vice-Pres. in charge of Sales,
The Hydraulic Press Mfg. Co.

The TECHNOLOGY REVIEW

Relating to the Massachusetts Institute of Technology

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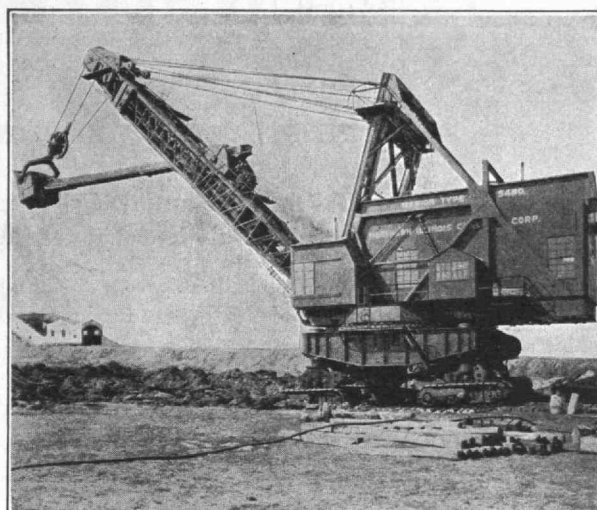
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H. E. LOBDELL, '17 Editor
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THE TABULAR VIEW

CONTRIBUTORS to this issue of The Review include an Assistant Professor and two Associate Professors at Technology, and a former Professor of the Petrograd Agricultural College. **❏** DONALD C. STOCKBARGER, '19, Assistant Professor of Physics at the Institute, has been interested in the study of radiations for several years. He attracted attention in 1926 by his work on "directional radio," the transmission of sound on a beam of ultraviolet light. He continued his researches with these radiations, and in 1927 lectured before the Society of Arts. Coming at a time when sun lamps of all descriptions are indiscriminately offered on the market, his article will have wide popular appeal. **❏** CHARLES TERZAGHI is an Associate Professor of Foundation Engineering here at Technology. He came to the Institute in 1926 from Robert College in Constantinople. Last spring announcement came of his being made a Fellow of the American Academy of Arts and Sciences. His story of his adventures in Central America forms an amusing account of a successful escape from laboratory routine. **❏** NIKOLAI A. BORODIN was chief specialist of fishculture in the Department of Agriculture of Russia before the Revolution, and Professor and Head of the Department of Fishculture and Fisheries at the Petrograd Agricultural College. He was sent by a Special Mission to continue his work for the American Museum of Natural History in New York and the Museum of Comparative Zoölogy at Harvard. During March, 1928, he delivered four lectures at the Institute on the fisheries and fishculture in Russia. He is well qualified to speak on conditions of scientific work in Russia from his observations there before and after the revolution. **❏** TENNEY L. DAVIS, '13, is an Associate Professor of Organic Chemistry at the Institute. Recently he was elected Secretary of a new division of the history of chemistry in the American Chemical Society. His review of the book by Dr. A. D. LITTLE, '85, is an important comment upon an important book.

VOLUME 31 of The Review again presents a series of etchings and one lithograph on its cover. All are the work of artists affiliated in some way with the Institute. The Editors are indebted to Professor WILLIAM EMERSON, Head of the Department of Architecture for his co-operation and constructive criticism in preparing the layouts. **❏** Mr. GEORGE C. WALES, '89, also offered helpful advice. The lettering for the eight covers was designed and executed by ROBERT C. DEAN, '26. **❏** "Plaza San Martin-Segovia," the subject on the cover of this issue, is the work of SAMUEL CHAMBERLAIN, '18. His original etching is on exhibition in the Print Gallery of Charles E. Goodspeed and Company during a special showing of his work now being held.

ASIDE from the cover, readers of The Review will notice the rearrangement of the magazine's contents and the new and broader emphasis on important work in the general fields of science and engineering. **❏** This is but a further fulfillment of The Review's policy of assembling and consolidating for its readers information not obtainable in any other single medium. In addition a new type, Garamont, has replaced the Caslon formerly used.

THE VANDERBILT HOTEL NEW YORK

*Thirty-fourth Street East
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ADMIRABLY situated on the Crest of Murray Hill. It is convenient to the business, shopping and theatre centers and to the Pennsylvania and New York Central Railway Terminals.

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WALTON H. MARSHALL
Manager



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and English Architecture
at*

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October 29 to November 10



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at 3 P.M., Mr. Chamberlain
will give an informal talk
on DRYPOINT. He will
demonstrate the process by
making and printing a
drypoint plate.*

*Your attendance will be
welcomed*



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We will be glad to have you and your family as guests any time you are in New York. We are sure if you visit *The SHELTON* once you will want to come again—doubly sure because yours is the kind of patronage we have and we want in the hotel and we do everything we can to make your stay enjoyable.

Ready for a dip in the pool



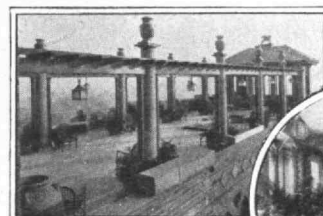
No charge for the pool
The swimming pool may be enjoyed by guests of the hotel—without charge.

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One of the five comfortable lounges to enjoy



The Solarium

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again. There was trouble to spare that night—everyone knew where to find it, and went out to get their share. Swearing? Sure—Mad? Clean through—who but a moron or fool giggles at a blizzard—but happy? Every last one of them, and fighting with all they had."

—A Manager's Report

Stone & Webster men are recognized for the part they play not only on the job but in the community. Wherever there is a Stone & Webster company, there you'll find a group of men, bound together by a common fellowship, taking an active part in local affairs; working for civic betterment, helping to develop local industries. The Stone & Webster training fits its men for public service.

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