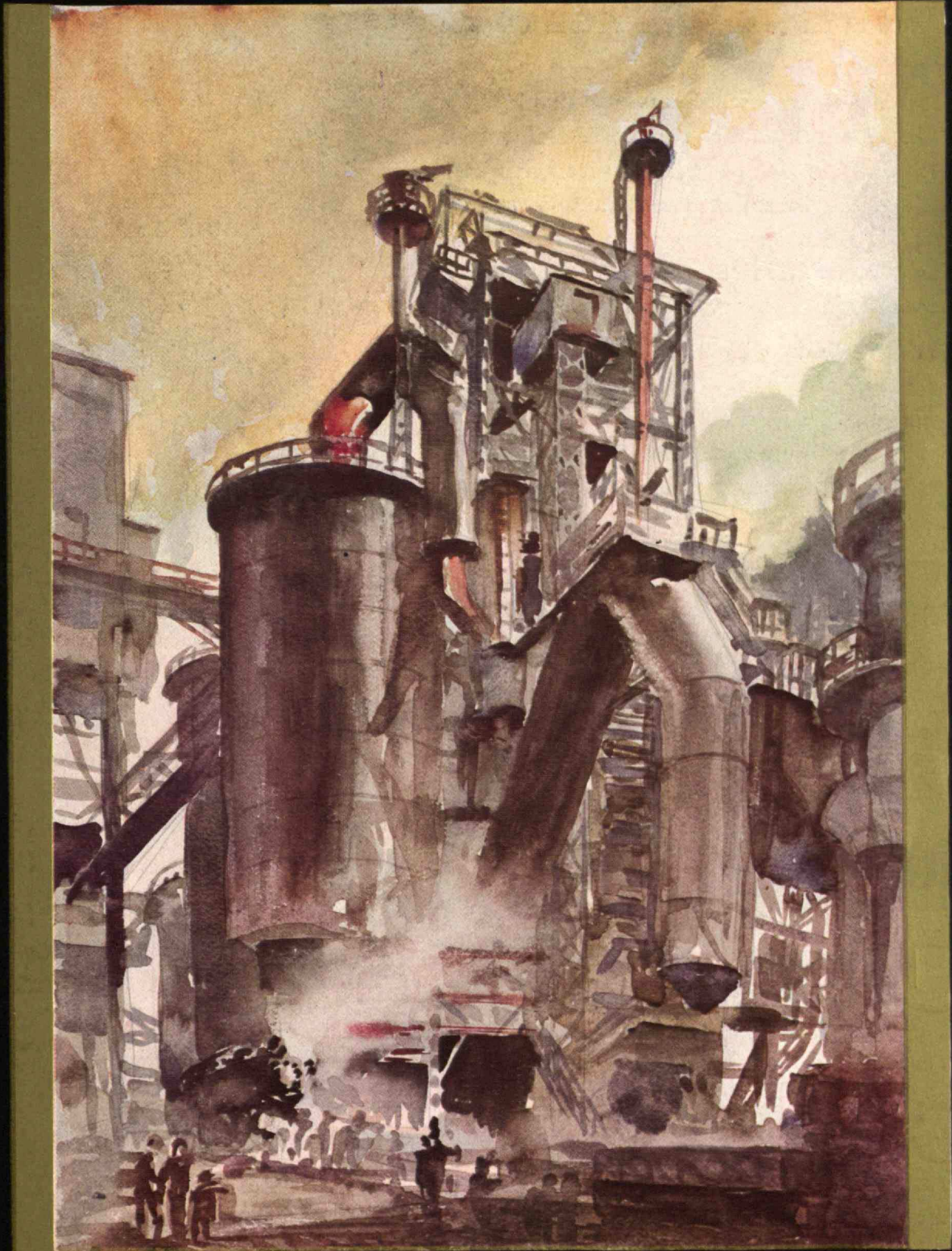


THE TECHNOLOGY REVIEW

MARCH 1931

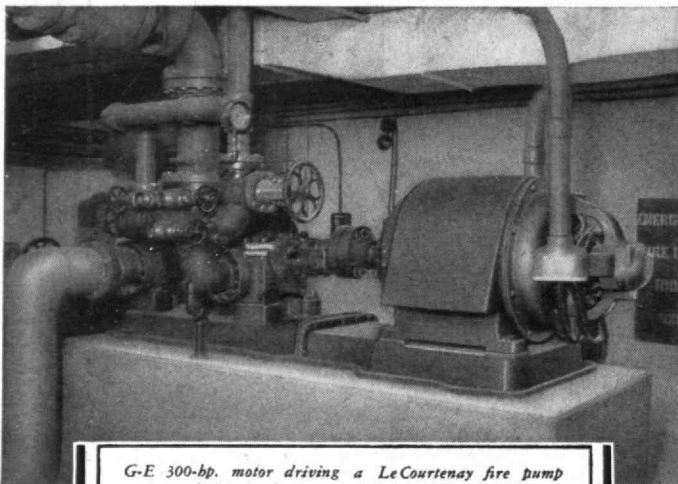


DRIVING A RIVER UP A SKYSCRAPER

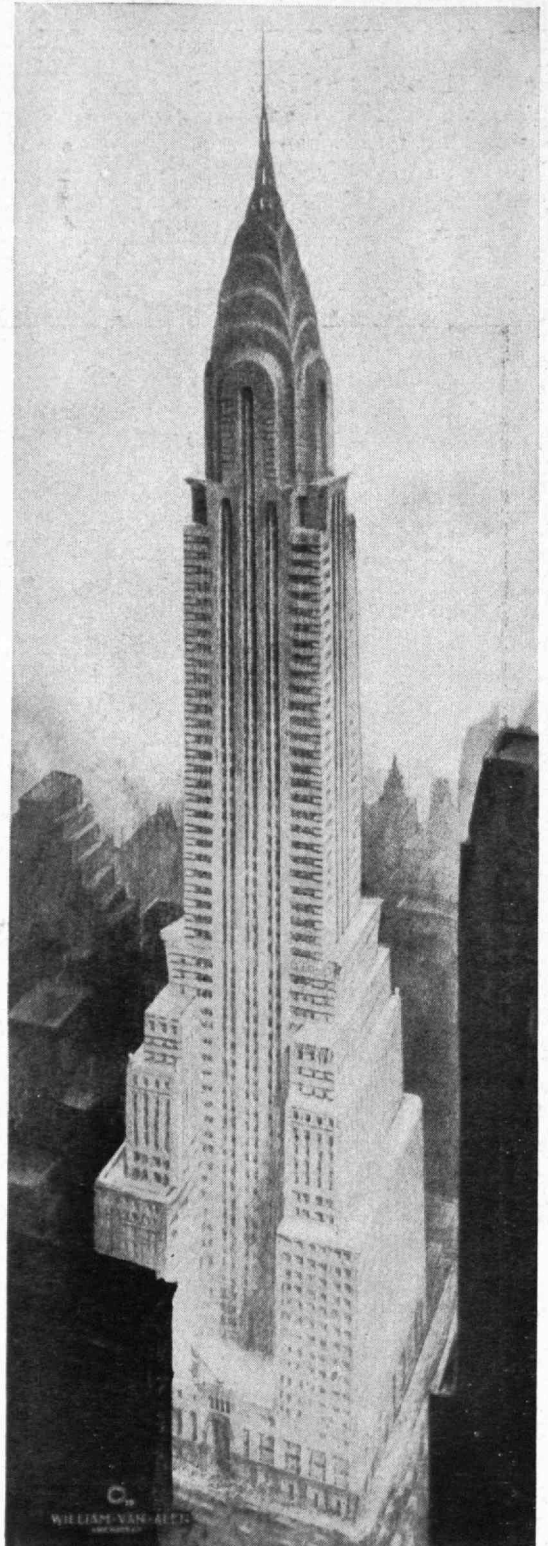
SEVEN hundred and fifty gallons of water a minute pouring out from three nozzles over one thousand feet above the busy streets of Manhattan—a small river driven skyward 77 stories—that's the service afforded by the G-E motorized fire pumps of the famous Chrysler building.

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G-E 300-hp. motor driving a LeCourtenay fire pump located in the basement of the Chrysler building, New York City

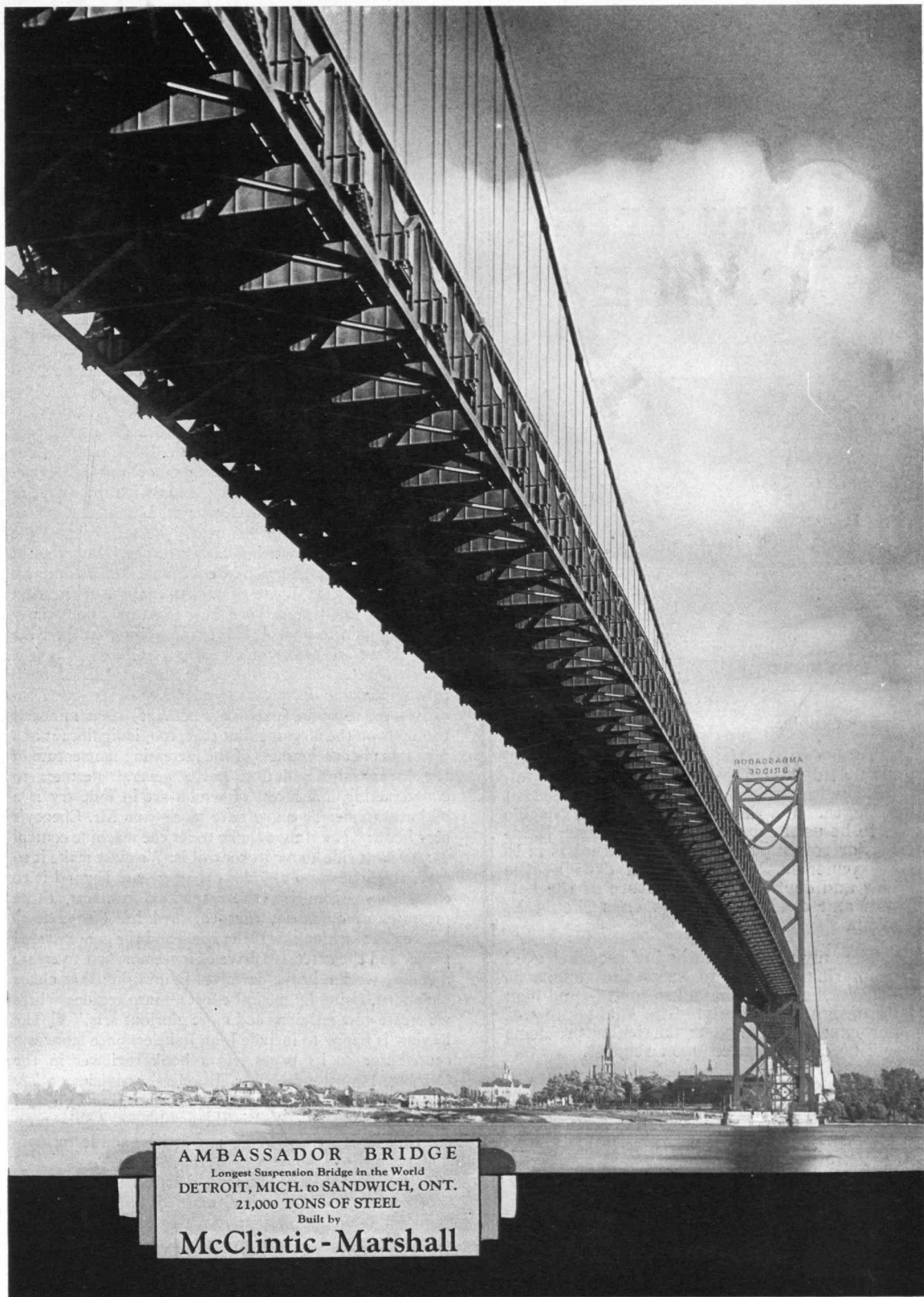


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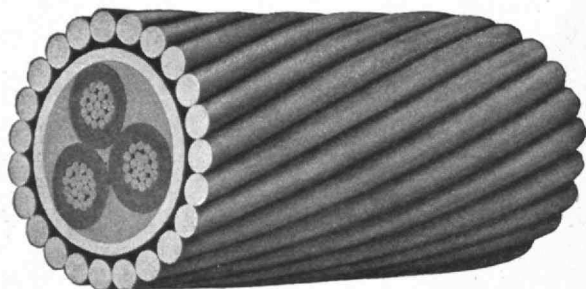
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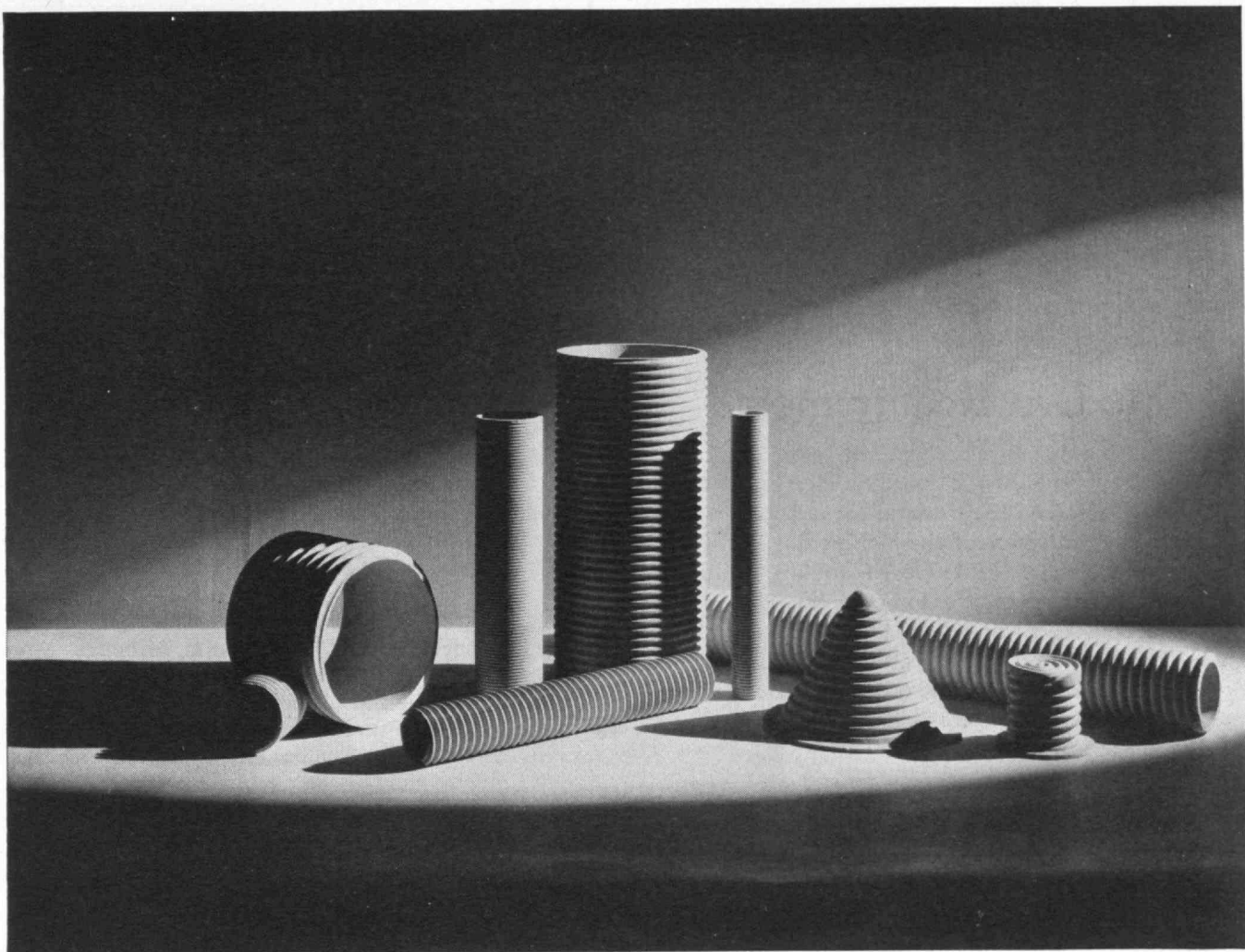
CHICAGO, 564 W. Monroe St. SAN FRANCISCO, 390 Fourth St.
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PHILADELPHIA, 1227 Fidelity-Philadelphia Trust Building
JACKSONVILLE, 417 Barnett National Bank Building

THE TABULAR VIEW

"WE ARE past," says Sheldon Cheney in his provocative book, *The New World Architecture*, "the possibility of challenging the machine, of curbing it, of attempting to escape from it. . . . We must move by machinery, communicate by it — live by it." In his article, "Machine-Made Minds," Mr. BAKELESS develops a correlative thesis: we cannot escape having our thinking conditioned by the machine. In so doing, he has brought out, as did the recent play "Berkeley Square," the impossibility of modern man to be happy in any other environment. The romance of the past could not substitute adequately for the relinquished comforts of the Twentieth Century. ¶ Mr. Bakeless, we feel, has attained an admirable state of Teufelsdröckhian detachment from the usual prejudiced criticism. His interest is not inspired by prospects of personal gain or loss, but comes rather from a very real preoccupation with the course of human progress and development. Like the German philosopher of "Sartor Resartus," he sees beyond the superficial aspects, writing rather of the psychological consequences of man in a new environment. The problem is thus interpreted as one of adjustment: the application of natural intelligence to a new situation, potentially neither good nor bad. ¶ It is encouraging that there are such astute critics of contemporary civilization as Mr. Cheney, Mr. Bakeless, and Mr. Stuart Chase. Such attacks seem to have awakened many otherwise critically inert to write (overfreely perhaps) their minutest thoughts on the machine. But that, too, is significant of a widespread consciousness of the increasing momentum of the Industrial Revolution and a general alertness to counteracting influences, of which art in industry is a major example. To quote once more from Mr. Cheney's new book: "The sin would be to let the machine control us: we must ride above it, control it. We must make it so easy, so efficient, so noiseless, that we rise beyond it to enjoy those serenities, those spiritual contacts, those pleasures of quietness, that enriched life (for a few) before the machine era. If the speed and the concentrated power and the extensive drive of it seem at first to create a chaos, we shall save ourselves by pushing that chaos underfoot, rising by mental effort — into regions where we create new religions and more glorious arts." ¶ The Review is happy to include John Bakeless once more as a contributor to its pages. As a book reviewer in the October, 1930, Review, Mr. Bakeless' activities on *The Living Age*, *The Independent*, and as Managing Editor of *The Forum* were described in these columns. At the present time he is writing books and articles and lecturing.

THE DEUTSCHES Museum, described by HARRY J. CARLSON in his article entitled "Fifty Pfennigs' Worth," is unique in that it possesses continuity and dramatic interest. These two characteristics go a long way to make it one of the most popular museums in Europe. Not many museums can boast of visitors that annually outnumber the population of the towns in

(Continued on page 268)



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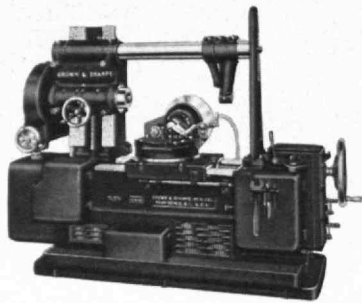
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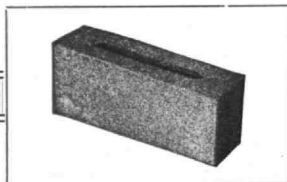


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THE TABULAR VIEW

(Continued from page 266)

which they are located. Even its manner of erection was unusual for modern times. Laborers gave their services on Sundays and holidays, and all Germany seemed to have a part in the assembling and the building. This general contribution of talents is reminiscent of the medieval spirit of community coöperation in the building of the great cathedrals. The results in both cases were more than could ever be obtained through organized labor. ¶ All this became possible under the direction of the remarkable Dr. Oscar von Miller who thus created the most outstandingly successful experiment in visual education yet made. Within this one building are the contributions of centuries of scientific development, forming nine miles of exhibits — 60,000 things to see — and each occupies its proper place in the evolution of the major branches of science, engineering, and industry. ¶ Although Mr. Carlson was born in St. Paul, Minnesota, he has lived in Boston most of his life. After his graduation from the Institute in 1892 he studied at the Atelier Duray, Paris, for two years. Since 1903 he has been connected with the firm of Coolidge and Carlson, architects. While continuing his practice of architecture, he lectured at the Massachusetts Normal Art School on the History of Architecture and Building Construction. As an alumnus, he has been unusually active in affairs of the Institute. He became a life member of the Corporation in March, 1921, and was President of the Alumni Association the following year. As an architect, his services were of value to President Maclaurin as one of the three architectural advisors in regard to the location of the new Technology buildings. He is also known as the architect of the new Guggenheim Aeronautical Laboratory at the Institute. Some of his best known structures are: "Dreamworld," the estate of Thomas Lawson; the Normal and Latin Group, Boston; Harvard, Wellesley and Technology dormitories; and the library of Hamilton College. In 1928 Bates College awarded an honorary master's degree to Mr. Carlson, "whose mastery of one of the finest of arts has given to this campus three notable buildings. He is a preacher in stone of the gospel that utility is most useful when joined to beauty."

DONALD C. STOCKBARGER, author of one of The Review's most celebrated articles, "Check the Sun Bath," appears again in this issue. His article, "The Useful Spectroscope," surveys the contributions that spectroscopy has made to the sciences. "The spectroscope," reads the article, "has become one of the greatest of the tools of science, yielding secrets about chemical compounds otherwise undiscoverable, reaching out to the stars, breaking into the atom, showing the kinship of the infinitely large with the unbelievably small." ¶ Dr. Stockbarger has labored long in the field of radiation. The radiation laboratory at the Institute, which is under his supervision, was among the first of its kind to be established in this country. Work has been carried on

(Continued on page 270)

442 Johnson Room Thermostats Control 867 Radiator Valves In Shell Oil Building, San Francisco

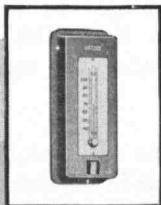
SHELL Oil Building, San Francisco, is completely equipped with Johnson Control. A Johnson Thermostat is on the wall of each office and automatically regulates the Sylphon valve on the radiator; maintaining an even normal temperature throughout the building regardless of outdoor weather conditions and changes; and producing a valuable fuel economy by preventing overheating, heat waste and unnecessary fuel consumption commonly occurring with manual regulation of radiators. The building is piped with



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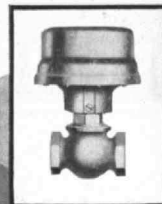
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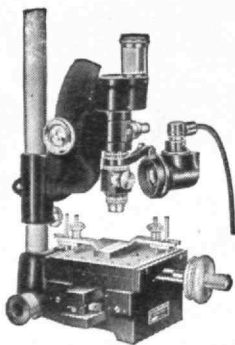


J. G. Russell, '13

H. Russell, '16

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THE TABULAR VIEW

(Concluded from page 268)

there in great variety, ranging from such mundane things as detecting fraudulent checks to studying rays that cure rickets; from investigating the properties of ultraviolet transmitting glass to enlarging the frontiers of pure science. Dr. Stockbarger was graduated from the Institute in 1919, joined the instructing staff in 1920, and received his doctor's degree in 1926.

WITH this issue DANIEL C. SAYRE makes his introductory bow as a contributing editor to The Review, joining Professor Tenney L. Davis, '13, and Mr. W. P. Cutter. Professor Sayre will contribute articles on aviation. As an Assistant Editor of *Aviation* and as an Associate Professor of Aeronautics at the Institute, his *bona fides* as a writer on aviation is not to be questioned. Professor Sayre is a member of the Class of 1923 and holds his master's degree from the Institute. He was one of the founders and promoters of the Boston Airport Corporation and he has been active in other ways in the field of air transportation. An article of his on that topic appeared in The Review for May, 1929.

THE water color on the cover of this month's Review was executed in 1929 by Mr. ROBERT C. DEAN on a trip to Europe as a traveling fellow of the Institute. It was made at the Krupp Factory in Essen, Germany. Mr. Dean was graduated from Technology in 1926 and obtained his master's degree the following year. He is now connected with Perry, Shaw and Hepburn, architects, and is also an instructor in the Institute's Department of Architecture. ¶ On page 274 are reproduced examples of a series of 12 murals recently executed by Henry Billings, artist, and exhibited in New York. Designed in the modern spirit, they are intended for modern buildings.

REGAULT, a contemporary of Pasteur and a professor at the Collège de France, won fame in his short life by the elegance and apparent ease with which he presented his scientific lectures. Once when congratulated upon this expository power, he remarked, "Ah, you do not see the steel corsets that I wear when I am speaking." Behind his facility lurked perpetual restraint, the mark of a true scientist. ¶ The incident is recalled by the continual constraint that must be exercised in conducting an interpretative scientific magazine. If such a journal is to be worth its salt, the editorial office must wear a steel corset even though the results of its work be sometimes marked by elegance and facility. It is necessary that every scrap of information be rigorously appraised and subjected to the scrutiny of experts, that mere publicity and propaganda be excluded, that the flood of scientific sewerage be not taken for the distilled water of science. Visitors to The Review office frequently remark about the Gargantuan waste paper basket that reposes beside the Editor's desk. They are told that it is the limbo of the pseudo, a symbol of perpetual restraint.

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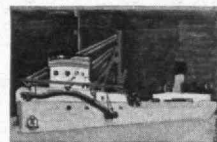
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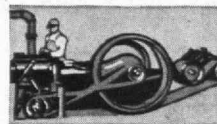
It is possible to illustrate in thumb-nail sketches on this page but a small handful of the G.T.M.'s—Goodyear Technical Man's—successful applications of Mechanical Rubber Goods to production problems in industry. Hardly a process of manufacturing exists, of which he has not practical, profitable knowledge. Hardly a business which may not profit from his wide experience.

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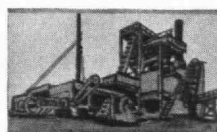
Back of the G.T.M. are Goodyear and vast resources of invention and technical skill. The full resources of *The Greatest Name in Rubber*, the superior design and materials of its products, are opened to you through this trained man. It is reasonable that he can help in your work—that what he knows will save you costs and trouble. Just write to Goodyear, Akron, Ohio, or Los Angeles, California, and ask the G.T.M. to call.



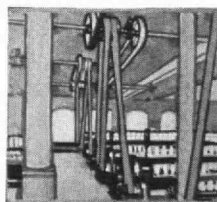
Goodyear Suction Hose as specified by the G.T.M. for rugged service on dredge "Kelly Island"—large bore hose armored internally with flexible metal spiral—typical example of Goodyear product thoughtfully applied to low-cost work in industry



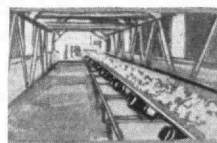
Goodyear Compass (Cord) Endless Belt on compressor—G.T.M.-specified for North Standard Mining Co., Eureka, Utah



Goodyear Elevator Belts—at work in the Rockhill crushing plant of the General Crushed Stone Co., Easton, Pa.—Goodyear Transmission Belting—all specified by the G. T. M.



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