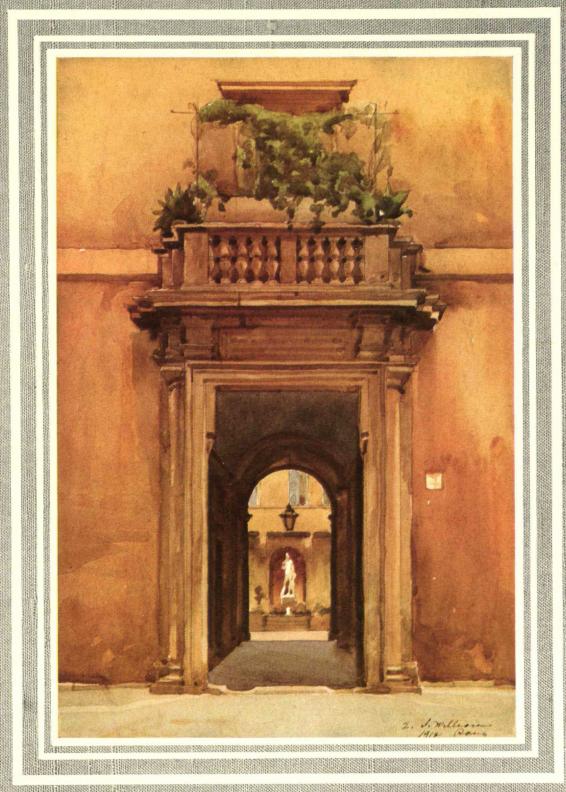
THE TECHNOLOGY REVIEW



JULY

1930



A. A. Albrecht Co. . Contractor

Greater Penobscot Building . . . Detroit, Michigan Smith, Hinchman & Grylls Architects

H. Kelly Co. . . Heating Contractor

REATER Penobscot Building, 561½ feet high, 47 floors, is completely equipped with Johnson Heat & Humidity Control. On the second to the fifth floors, inclusive, (occupied by the Guardian-Detroit Bank and

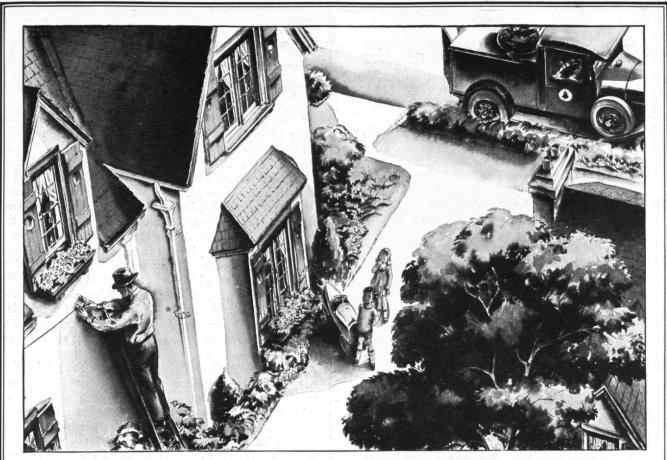
the Guardian Trust Company), Johnson regulation is on the direct radiation and the air conditioning. The sixth to the forty-seventh floors, inclusive, (devoted to miscellaneous offices) have Remote Control on the riser valves, divided into thirty-six zones—so that steam may be supplied to or shut off from any zone desired. This is an

example of the various applications of Johnson Heat & Humidity Control, and another impressive reference endorsing Johnson leadership.

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An Advertisement of the American Telephone and Telegraph Company

When you order a telephone, you want it put in promptly. During the last five years the average length of time needed to have a telephone installed has been cut nearly in half.

You want quick and accurate service, free from trouble. Good as the service was five years ago, today there are a third less troubles per telephone. During this same period there have been marked increases in the already high percentage of perfectly transmitted conversations.

When you make a toll call, you want a prompt, clear connection. Five years ago 70 per cent of all toll and long distance calls were handled while the calling person remained at the telephone. Today all but a very small per cent are handled this way.

The Bell System is organized to give constantly

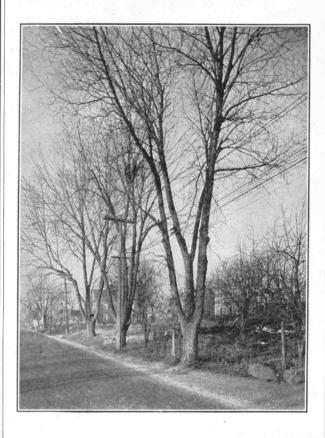
improved service. Several thousand persons in the Bell Laboratories are engaged in research that improves the material means of telephony. The Western Electric Company, with plants at Chicago, Kearny, N. J., and Baltimore, specializes in the manufacture of precision telephone equipment of the highest quality. From its warehouses all over the country, it supplies the millions of delicate parts for Bell System apparatus.

The operation of the System is carried on by 24 Associated Companies, each attuned to the area it serves. The staff of the American Telephone and Telegraph Company is continually developing better methods for the use of these operating companies.

Your telephone service today is better than ever before. The organized effort of the Bell System is directed toward making it even better tomorrow.

Make overhead line repairs permanent by splicing in

FIBREX Tree Wire



Pick out the weak spots on your overhead lines - places where temporary repairs have been made or where the insulation has worn down. Then make your repairs permanent by splicing FIBREX Tree Wire into the line.

FIBREX is non-metallic and non-inductive. It will not rot. It cannot rust. It prevents arcing, short circuits and leakage. It is the best protection against abrasion.

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THE TABULAR VIEW

ROFESSOR L. MAGRUDER PASSANO is of that choice and fortunate group, the Carrollites, the members of which have discovered solutions for most of life's insoluble problems clearly set forth in "Alice in Wonderland." It is typical, therefore, that he should begin a paper on such a perplexing subject as Time by referring to the illuminating discourse on that subject which took place at the Mad Tea Party. It was then, you will remember, that the Mad Hatter removed time from the neuter gender and definitely placed it in the masculine. But the subject of time, as Professor Passano remarks in his paper, is not one to be treated frivolously, and he demonstrates that any definition of it must satisfy both the mathematicians and the philosophers.

By way of parenthesis, we raise the question as to what the Mad Hatter would think of Einstein's latest contention that space has become carnivorous, devouring matter, and that time is after all not so important, be it an it or a he.

HARLES D. CHILDS is manager of the Print Department of Goodspeed's Book Shop and, therefore, pretty thoroughly acquainted with the amenities of print collecting as well as prints themselves. In response to a letter from The Review earnestly soliciting biographical information, he wrote: "Various articles of mine, mostly short, have been published in the Print Connoisseur, American Forests and Forest Life, Boston Transcript, and so on, and a monograph, 'Samuel Chamberlain ['18]: Etcher and Lithographer' published by Goodspeed's Book Shop. As a hobby, I have amused myself with etching and drypoint and have published a few small plates quite recently. I was born in August, 1905, in Needham, Mass., and hope that no obituary notice will be posted for some time to come." It is particularly appropriate that Mr. Childs be introduced to Review readers because of the assistance and advice he has lent the Editors during the last several years in the selection of subjects for the covers of the magazine.

EARLE BUCKINGHAM, who presents the results of some of his research at the Institute, has had a varied career in the field of mechanical engineering, beginning at the United States Naval Academy in 1906. Since 1925, he has been Associate Professor of Engineering Standards and Measurements at the Institute. He is the author of "Principles of Interchangeable Manufacturing," 1921, and "Involute Spur Gears," 1922.

PROFESSOR ROBERT E. ROGERS needs no introduction anywhere in the world. Institute Alumni will be expecting his article on Page 441, for he has unfailingly lent a hand in reporting Alumni reunions and assemblies.

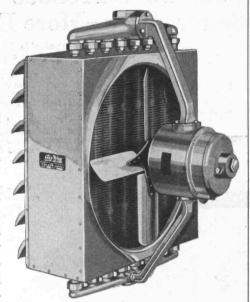
HANS MÜLLER, who prepared the review on Page 444 is one of the Institute's young physicists. He was born in 1900 at Amriswil, Switzerland, and received a diploma in engineering from the Technische Hochschule of Zurich in 1923, and the degree of D. Sc. in 1928. At the present time he is Assistant Professor in the Department of Physics.

(Concluded on page 420)

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THE STORY OF ORGANIC CHEMISTRY

> By HORACE G. DEMING, Ph.D. Professor of Chemistry, University of Nebraska

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THE TABULAR VIEW

(Concluded from page 418)

CINCE 1922 The Review has been published eight O times per year and the present number concludes Volume XXXII. Hereafter, there will be nine numbers per year, the extra issue being dated October. Diligent readers of that issue will note on its masthead that the magazine has a new Editor, J. RHYNE KILLIAN, JR., '26; to less punctilious readers, however, this change may not be perceptible, for Mr. Killian, as Managing Editor of The Review since 1927, has been responsible for the editorial content and make-up of the last three Volumes.

Mr. Killian becomes the seventh Editor since Volume I, Number 1, dated January, 1899, made its bow on December 20, 1898, as a quarterly magazine. In format the initial number was of the so-called standard size (61/2" x 91/2"), printed on real rag paper with tipped in half tones and photogravures, all wrapped in a sombre brown

To the Association of Class Secretaries, The Review owed its genesis, and the three men who planned it were: ARTHUR D. LITTLE, '85; C. FRANK ALLEN, '72; and the late James P. Munroe, '82. Mrs. William Barton Rog-ERS advanced them \$1,000 as a guarantee fund, they appointed ARTHUR T. HOPKINS, '97, as Editor, and The Review became an actuality.

After three numbers, Mr. Hopkins resigned; WALTER HUMPHREYS, '97, now Secretary of the Corporation, was Editor of the number dated October, 1899, and, with the beginning of Volume II, Mr. Munroe undertook control. For eight years Mr. Munroe labored until, in 1908, he transferred the responsibility to Isaac W. Litchfield, '85, who served until 1917 when Robert E. Rogers became Editor. HAROLD E. LOBDELL, '17, succeeded Professor Rogers in 1922 at which time Eric F. Hodgins, '22, became Managing Editor, being succeeded by Mr. Killian in 1927.

Besides Mr. Killian, the staff of The Review, Volume XXXIII, will include RALPH T. JOPE, '28, as Business Manager, and John J. Rowlands as Contributing Editor. Mr. Jope has been with the magazine since 1928, and Mr. Rowlands, since 1925. Mr. Lobdell will continue with The Review as Publisher.

The Review regrets that Miss Catherine C. Carlson, a member of the staff since 1926 and Editorial Associate of Volume XXXII, has resigned, but congratulates both Miss Carlson and Mr. Hodgins on their approaching marriage.

THE REVIEW is not published during the summer months following July. This issue concludes Volume XXXII. Number 1 of Volume XXXIII, which will contain nine instead of eight numbers, will be published on September 27, and dated October. Readers who bind their copies of The Review are reminded that if they possess eight numbers of Volume XXXII, their files are complete. An index to the Volume will be ready on September 15, and will be supplied post-free upon request. Verbium sat sapienti!

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The Palmolive Building, Chicago. In the foreground, the Fourth Presbyterian Church. Indiana Limestone both! Architects for Palmolive Building, Holabird & Root. Builders, Lundoff-Bicknell Company.

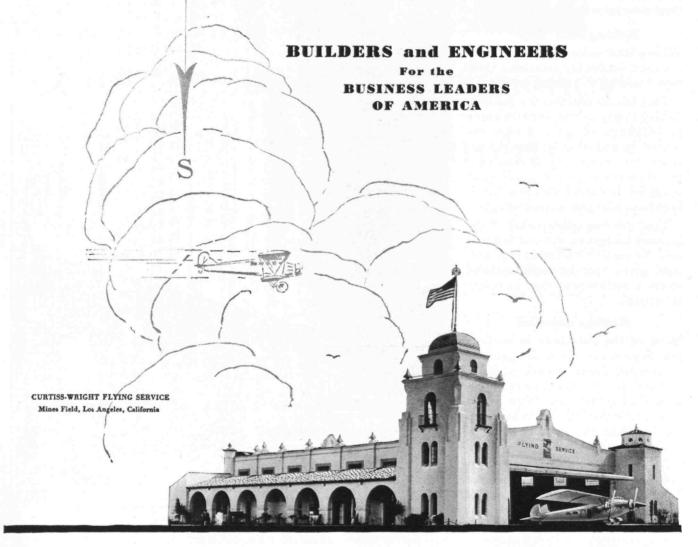
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