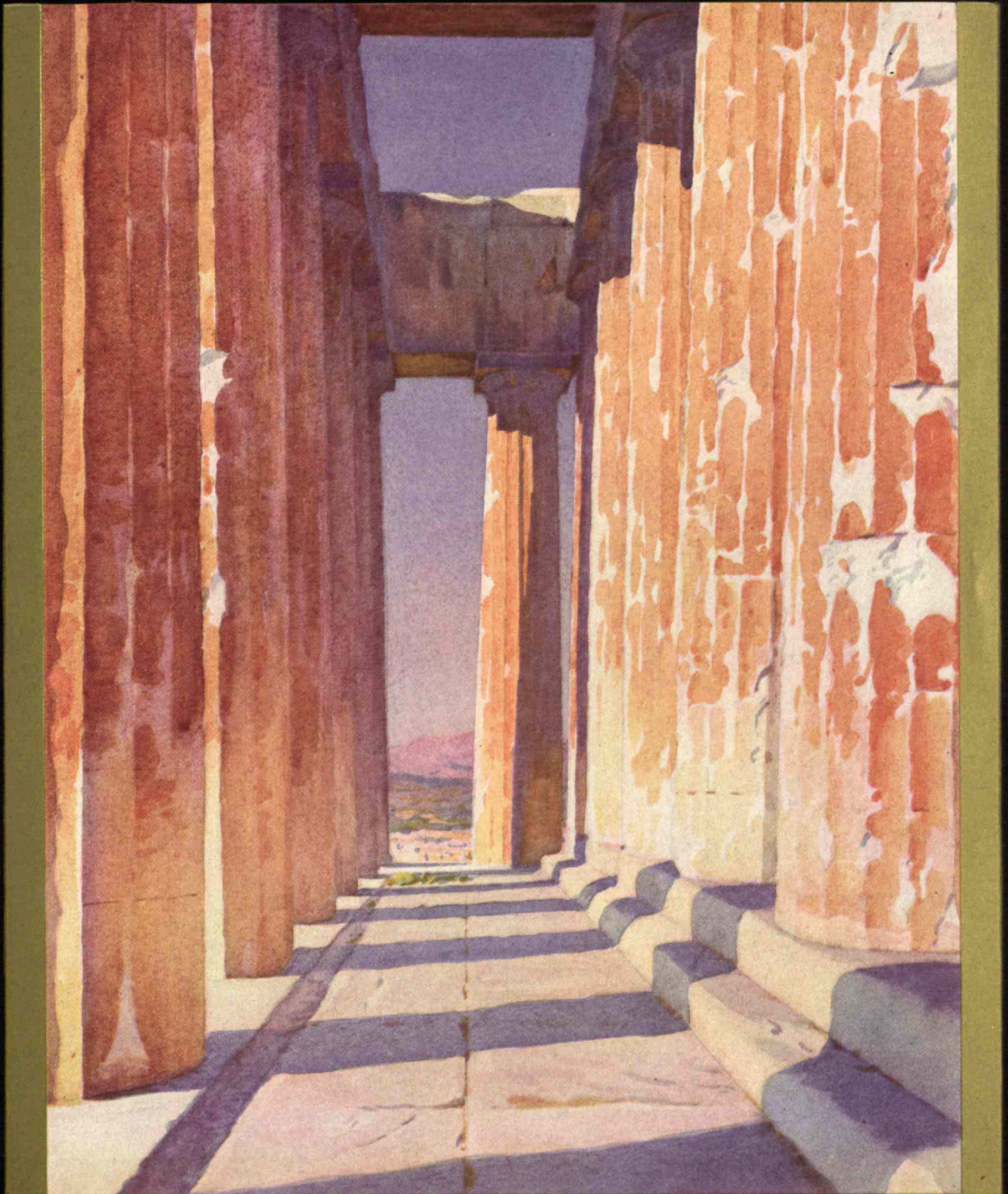


THE TECHNOLOGY REVIEW

MAY 1931



Railway Electrification In the Future Will It Test Your Mettle?

TO ADVANCE the technology developed by electrical pioneers who designed and applied electric railway equipment to conquer mountains and to speed terminal traffic — there's a task to try your temper!

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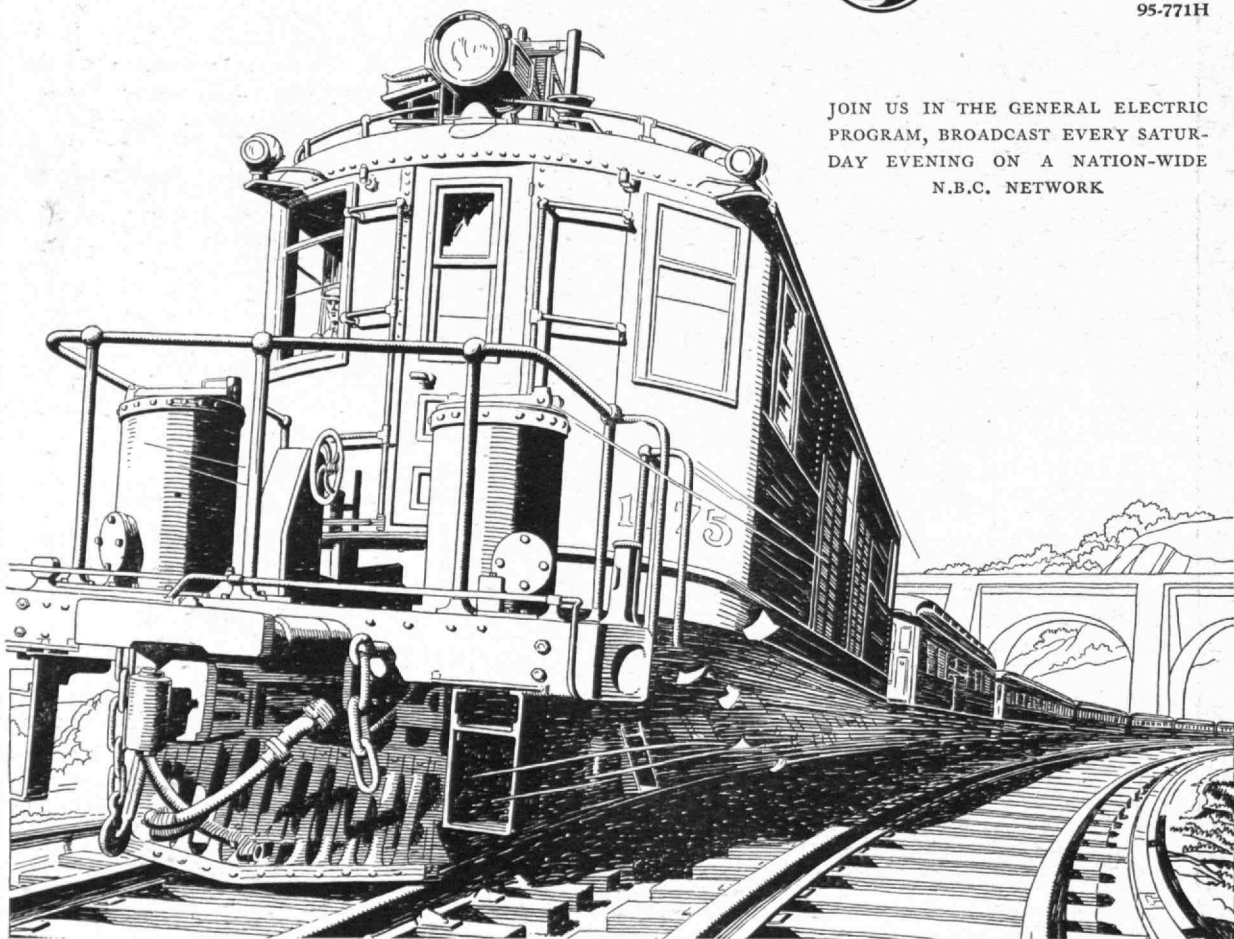
Out of college, established in your profession, it may be *your* job to direct a part of this onward march of electrification.

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Booklet GEK-55 tells about some of the railway electrification projects with which G-E engineers have been identified. Address your request to Publicity Department, General Electric Company, Schenectady, N. Y.

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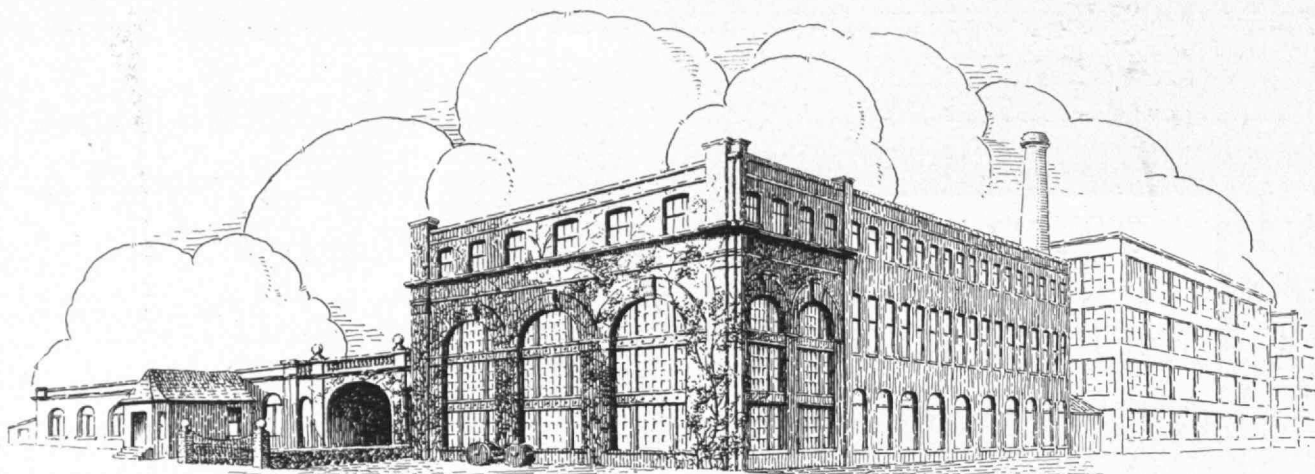
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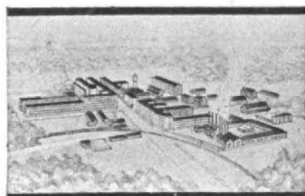


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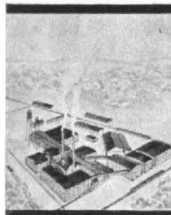
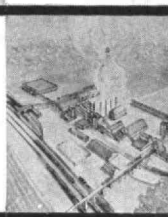
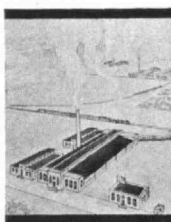
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Juvenile furniture, cabinets for radios, banquet and bridge tables, chairs for home and industrial use are but a few of the products manufactured at the Edison plant in Wisconsin. Precision instruments, special electrical apparatus and a host of other special manufactures, both small and large, are produced for industry in the plants of Thomas A. Edison, Incorporated.



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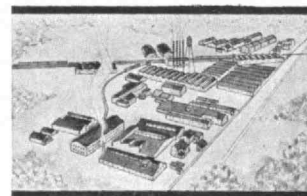
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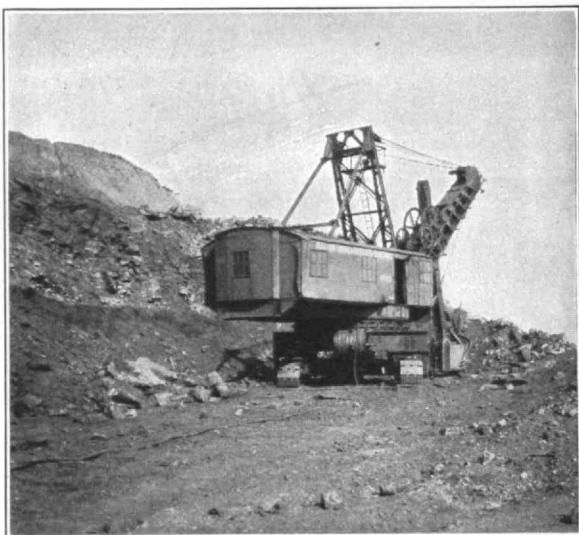
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THE TABULAR VIEW

APPLIED geophysics—what is it? Few laymen are aware of the development and uses of this new applied science and of its importance in the world's economy. Prospecting is, of course, one of the chief functions of the mining and petroleum engineer. As the more apparent locations of oil and minerals in the earth's surface have already been found, it has been necessary for the mining engineer to refine his prospecting methods and to substitute for an age-old technique improved means of discovery. The traditional divining rod, satisfactory to the superstition and credulity of an earlier age, has been supplanted by the applications of instruments developed by science. "Magnetic needles, delicately adjusted, point to iron; the electric plummet discloses the presence of other metalliferous ores, and the seismograph and torsion balance become indispensable aids in revealing the location of new oil pools." Applied geophysics, then, may be defined as the application of physical science to the study of the earth's structure in a commercial way. ¶ Because applied geophysics, or physical prospecting, is to most people merely a phrase and nothing more, The Review is happy that it can present such a lucid exposition of its methods and procedures as that prepared by Mr. ROLAND F. BEERS and presented on page 375. Mr. Beers has had a great variety of experience in making geophysical surveys for oil companies in Texas and Oklahoma. After receiving a degree in Electrical Engineering from Rensselaer Polytechnic in 1921, and while employed in the Raytheon Laboratories in Cambridge, he took part-time courses at the Institute in Course VI-C, finally obtaining his master's degree in 1928. After leaving the Institute, he went to the Southwest as a Party Chief with the Geophysical Research Corporation.

MR. LOBDELL, publisher of The Review, it will be recalled, was the author of a comparative study of American and European train speeds published in the February Review. His article on locomotives in this issue is the first of a series of two.

THE history of chemistry has long been one of the chief interests of Professor TENNEY L. DAVIS, Contributing Editor to The Review. "The Pill of Immortality," which he contributed for this month, deals with the early history of alchemy and was written with LU-CHIANG WU. Mr. Wu, of the class of 1928, now doing graduate work at the Institute, translated the passages from one of the Taoist Classics purporting to be a commentary on the Book of Change. It is in reality, however, a treatise on the preparation of the pill of immortality. ¶ After his graduation from Technology in 1913, Professor Davis continued his studies at Harvard where he received his master's and doctor's degree. In 1919 he joined the Institute's Instructing Staff, and since 1926 he has been an Associate Professor of Organic Chemistry. His keen interest in the history of chemistry opened the way to his election as Secretary for the Division of the History of Chemistry of the American Chemical Society in 1927. He

(Continued on page 368)

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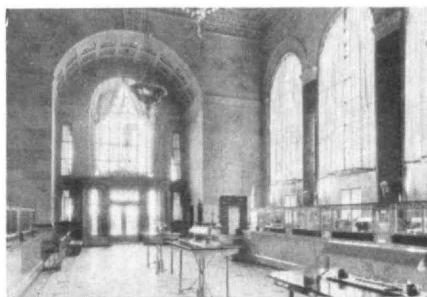
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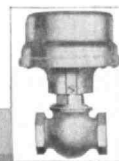


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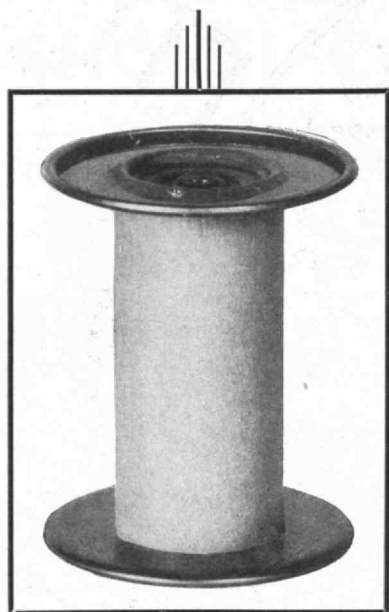
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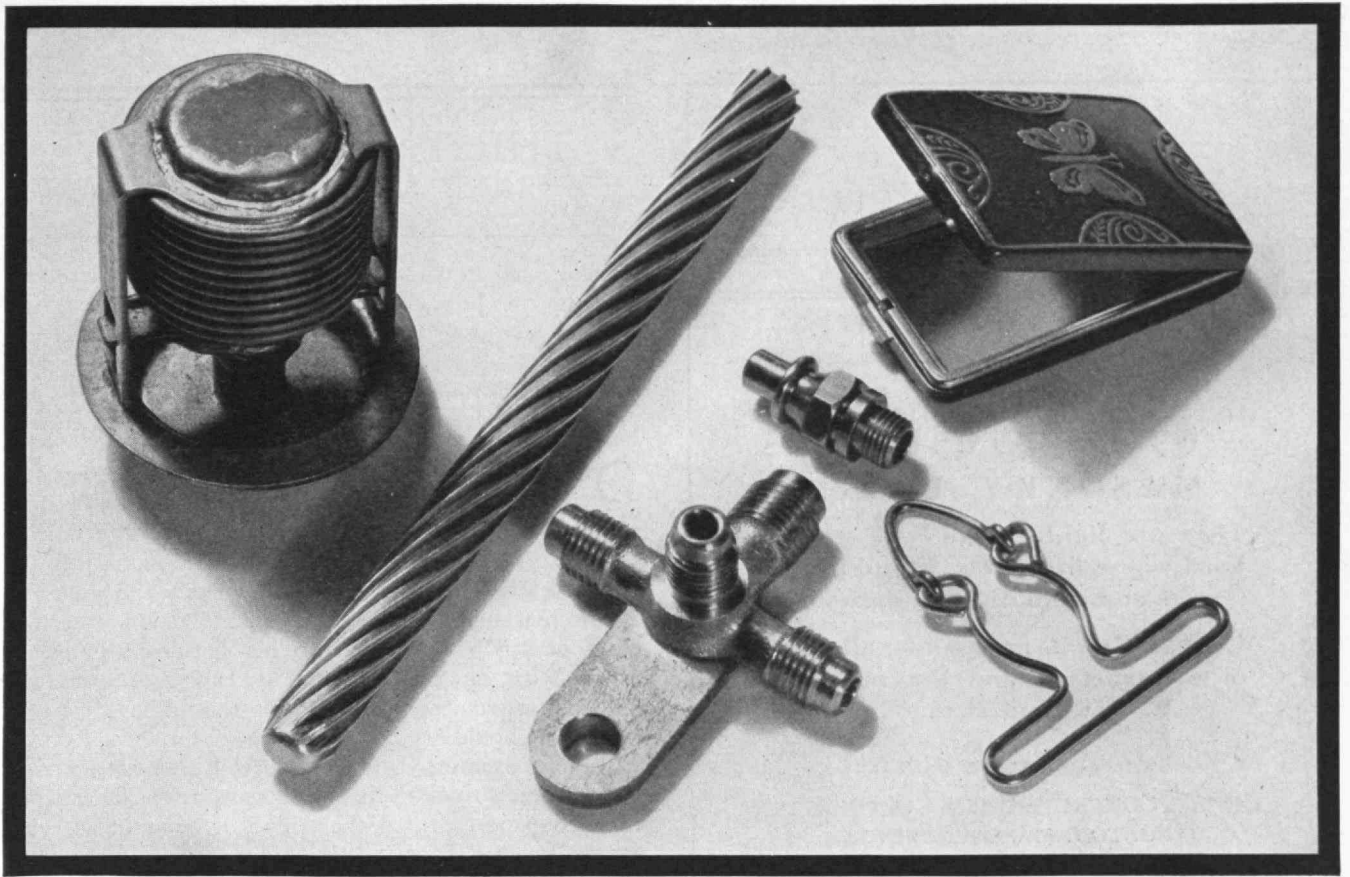
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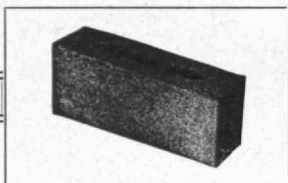
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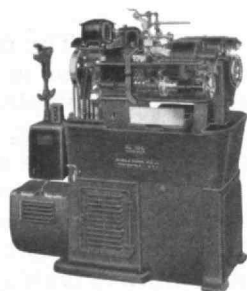
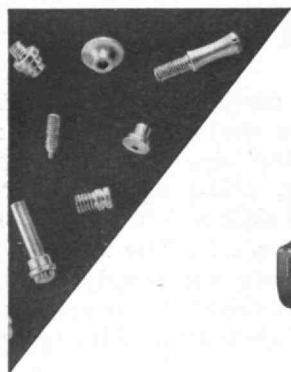
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PROVIDENCE, R. I.

THE TABULAR VIEW

(Continued from page 364)

has collected an unusual library on this his favorite subject. In the July, 1929, Review Professor Davis contributed an article on the beginnings of authentic science.

Perhaps like every human woe
It springeth from the radio.

DELICATE geophysical instruments are not required to detect in the upper strata of the American people a growing displeasure with radio broadcasting in this country. The persistent, distasteful, indiscriminating, advertising jargon that fills such a large part of the programs is the chief source of discontent. Radio broadcasting, the child of big business, is also big business's ballyhoo artist. What can be done about it? Such an enormously valuable instrument of civilization should never be corrupted; it should not even be misused. Professor ROBERT E. ROGERS examines this problem in his article on page 386. He points to radio's tendency to usurp the function of the newspapers and to the failure of our scheme, supported by advertising, to give radio entertainment compatible with normal, human intelligence. After a particularly thorough pathological consideration of American radio he concludes with some suggestions for mitigating the present undesirable conditions. ¶ A correspondent of the *New York Times* in a letter to that newspaper last month made some suggestions that in many ways supplement Professor Rogers' remarks. His first suggestion for reform is the necessity for conducting broadcasting as a public service without any form of commercial motive. The second point concerns the central, unified control of radio service, free from the all-pervading spirit of competition. Third, the service should be established under the auspices of the State but not conducted by the State. Fourth, there should be adequate financing through a licensing system or in some way that does not put the public at the mercy of the advertisers. "The ether should not be put at the power of money." ¶ Several things become plain from the trend of these criticisms: that the public doesn't know its own mind; that it is susceptible to good influences as well as to the mediocre or unworthy; and that the solution of the middle-class taste problem does not necessarily mean a general lowering of standards to the "level of 13-year olds," but may lie in the furnishing of genuine entertainment, which after all has a fundamentally universal appeal when allied to art. ¶ Professor Rogers was graduated from Harvard in 1908 and received his master's degree in 1909. He has been a teacher in the English Department at the Institute since 1913, serving as Editor of *The Review* from 1917 to 1922, the only non-Technology man to hold that position. For a number of years he has been connected with the Massachusetts Division of University Extension and it was under their auspices that he broadcasted a course in American literature in 1924, one of the earliest experiments in education by radio.

(Continued on page 370)