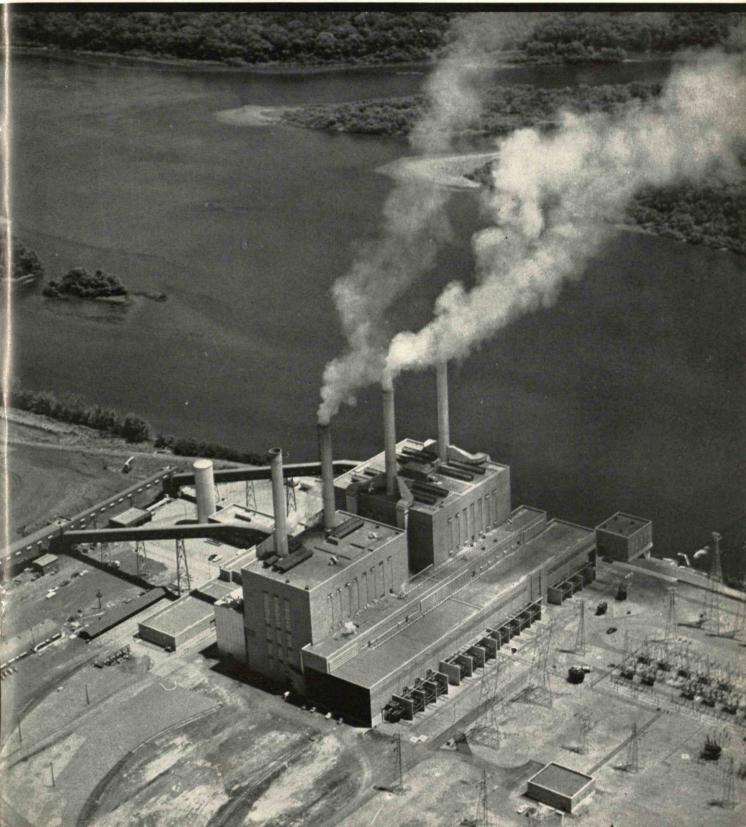
TECHNOLOGY REVIEW February 1955



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OPERATING CONDITIONS: MPB bearing serves as anti-friction cam follower on manually operated arrestment control shaft . . bearing transmits precise action, produces natural "operational feel" CRITICAL: reduced friction accurate bearing concentricity which permits close, accurate alignment of mating parts. RESOLVED: by use of MPB No. 4 Radial Ball Bearing.

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By performing specification tests only on previously aged Anhydrex XX insulation, Simplex makes sure that it will function reliably for years. It's your assurance that you've bought, and will get, the high quality cable your installation requires.

Developed to provide the best rubber insulation for high voltage circuits, Anhydrex XX gives you trouble-free, long-lived service. For high voltage cable insulation that stays young, investigate Anhydrex XX. Folder No. 1,009A has more complete details. Send for it.

1,009A has more complete details. Send for ANHYDREX XX

SIMPLEX WIRE & CABLE CO., 79 Sidney Street, Cambridge 39, Mass.

THE TECHNOLOGY REVIEW, February, 1955, Vol. LVII, No. 4. Published monthly from November to July inclusive at Emmett Street, Bristol, Conn. Publication date: twenty-seventh of the month preceding date of issue. Annual subscription \$4.00; Canadian and Foreign subscription, \$4.50. Entered as second-class matter December 23, 1949, at the Post Office at Bristol, Conn., under the Act of March 3, 1879.

now we're "prefabbing" big boilers!

A big power boiler is a tremendous project. It takes at least a year to design and fabricate its mountain of parts . . . and about another year to put them all together at the plant site.

A particularly difficult part of erection is piecing together the vast jig-saw puzzle of many miles of tubing, which reach the plant site in thousands of separate pieces. Finding the right piece for each separate location at times becomes sort of a gigantic treasure hunt.

But now Combustion has streamlined the field erection of boilers by developing special machines and methods which make it possible to prefabricate large panels of tubing in C-E shops. This development means faster loading and unloading . . . less damage in transit . . . easier and more compact storing at plant site . . . no needlein-a-haystack process of locating tubes . . . and, most important of all, substantial reductions in time and cost of erection.

This advance in the technique of building big boilers is one of a number of current Combustion developments which add to the values built into all C-E Boilers, regardless of size. You can gain the advantages of these "plus values" by selecting your next boiler from the C-E line which includes a type and size just right for your steam needs.

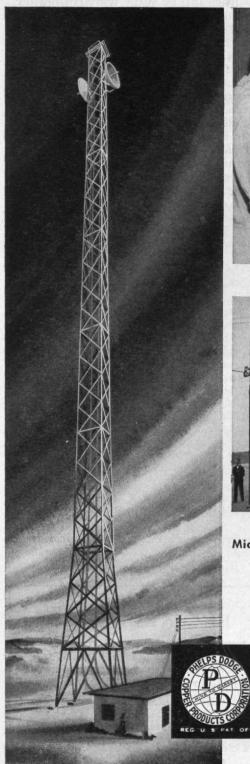
Looking up through the furnace of a 13-story high C-E Boiler, showing panels of tubing in place on most of one wall and on part of another. Insert shows one panel being hoisted into position.

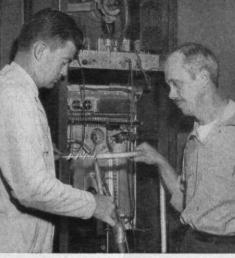
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THE TABULAR VIEW

Challenge.-Thrust into an unsought position of world leadership as the result of two World Wars into which it was forced, the United States is now the major power supporting a truly peaceful world composed of free men and free nations. As such, it faces a gigantic challenge in the military, political, and economic fields, from powers bent on world domination. The problems thus imposed on our nation are discussed in the "Challenge Facing the United States" (page 181) by WALT WHITMAN ROSTOW, Professor of History in the M.I.T. School of Humanities and Social Studies. Professor Rostow comes well prepared to deal with such topics, for his entire interesting professional life has been devoted to a study of history, economics, and international relations. Yale University conferred upon him the B.A. and Ph.D. degrees in 1936 and 1940, respectively. After a year of teaching at Columbia University and two years in the Army, from which he was honorably discharged with the rank of Major, Dr. Rostow went to England where, as Rhodes scholar and Harmsworth Professor of American History, he received an M.A. degree in 1946 from Oxford. In 1949 he received another M.A. degree from Cambridge University where he was professor of United States History. He served for two years on the Economic Commission for Europe, and since 1950 has been a member of the M.I.T. School of Humanities and Social Studies where, incidentally, Mrs. Elspeth D. Rostow is assistant professor of history.

Maturity .- The second and concluding part of an article, "Maturity through Student Counseling" (page 186), by DR. DANA L. FARNSWORTH describes the system of student counseling now in operation at the Institute. In the present system, which was developed while Dr. Farnsworth was head of the Institute's Medical Department, the difficulties which incoming students face in making the transition from preparatory school, or college life, are minimized through a counseling program that brings the new student into contact with Faculty members, as well as with upperclassmen, and makes full use of the principles outlined by Dr. Farnsworth in the January 1955, Technology Review. Dr. Farnsworth is a native of Troy, W. Va., and as recorded in his biographical data in this section of The Review last month (page 126), he was graduated from the Harvard Medical School in 1933. Technology's loss was Harvard's gain last summer, when Dr. Farnsworth became Henry K. Oliver Professor of Hygiene and Director of the University Health Services.

Logic.-The progressive standpoint (and especially the logical approach) which is a part of the stock in trade of (Concluded on page 174)

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THE TABULAR VIEW

(Concluded from page 172)

engineers-as a result of their professional training-is a valuable asset in public life. Engineers are called upon, in increasing numbers, to place their powers of logic, analysis, and objectivity at service in the public welfare through greater participation in political affairs. This exhortation is made in an article "Engineers in Politics" (page 189) by THOMAS C. DESMOND, '09, who was graduated magna cum laude from Harvard University in 1908 and from the Institute's Course in Civil Engineering the following year. For two decades, thereafter, he headed his own firm of consulting and contracting engineers. until his retirement from engineering work in 1929. Since 1930 he has been a Senator in the New York State Legislature, having recently been elected to serve his 25th consecutive year in that post. Senator Desmond was awarded the degree of doctor of humane letters from Union College in 1939. He has been active in alumni matters, a member of many Visiting Committees and, since 1941, has been a life member of the M.I.T. Corporation. Dr. Desmond's own engineering and legislative life lend convincing emphasis to the views expressed here.

Foresight.-There's more than meets the eye in the study (page 191) which FREDERIC W. NORDSIEK, '31, makes of human vision and the most common of optical aids-eyeglasses. Mr. Nordsiek, a skilled writer with more than 100 articles to his credit in the last decade, outlines the basic mechanism of human vision, discusses optical tests and methods of correcting the more common visual defects, discusses the assembly of eyeglasses-and sends the patient on his way with 20/20 vision. Mr. Nordsiek has been an editorial associate of The Review since 1944. Accordingly, he is well known to Review readers, not alone for the signed feature articles which appear in each volume, but also through the shorter, unsigned pieces in the Trend of Affairs section, which appear in almost every issue. Since his graduation from the Course in Biology and Public Health in 1931, Mr. Nordsiek has had a varied and interesting professional career devoted to various aspects of public health or the food industry. For the past several years he has been engaged in administering research grants for the American Cancer Society.

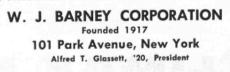
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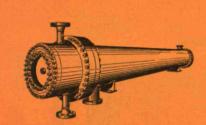


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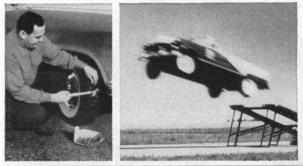
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