*Published by Elliott Company* . . . . POWERFAX is a magazine of information for engineers and operators of steam and electric power plants, or in charge of industrial processes. More than 37,000 copies are distributed quarterly with the compliments of Elliott Company to its customers and friends. Address correspondence to C. W. Kalbfus, Editor, Elliott Company, Jeannette, Pa.

# POWERFAX

VOLUME THIRTY-TWO NUMBER 4

## CONTENTS FOR WINTER 1954

THE DESIGN AND APPLICATION OF INDUSTRIAL TURBINES....4
1954 IRON AND STEEL EXPOSITION....8
PREMIER OIL REFINING COMPANY EXPANSION....9
MURRAY GILL STATION OF KANSAS GAS AND ELECTRIC COMPANY....10
PROGRESS REPORT ON THE INDUCTION STIRRER....12
WITH LEE RUBBER & TIRE COMPANY AT CONSHOHOCKEN....14
FANSTEEL METALLURGICAL CORPORATION BOASTS COUNTRY'S LARGEST REFRACTORY METAL ROLLING MILL....16
BRIMSTONE IS MINED WITH PUMPS....18
NEW STEAM PLANT FOR AUTOMOTIVE WORKS....20
INTERESTING BOWIE GASOLINE PLANT....21
MOLONEY ELECTRIC COMPANY PROGRESS....22
LIGHT'S DIAMOND JUBILEE....24
RADIAL DIESEL GENERATOR SUPPLIES POWER IN UPPER MICHIGAN....25
EXPANSION AT COOPERATIVE REFINERY (Phillipsburg, Kansas)....26
GOOD-LOOKING COMPRESSOR STATION (Texas Eastern)....28
LINE OF BAROMETRIC CONDENSERS....29
THIS GAGE READS INSIDE TUBE DIAMETER DIRECTLY IN THOUSANDTHS OF AN INCH....30
POWERCRAX....31

### New Publications

New and completely up-to-date literature has just been released covering the entire line of large Elliott induction motors. These bulletins illustrate and describe the latest design details and mechanical modifications:

PB 7000-1—Two-Pole (3600 rpm) Induction Motors, 350 to 4000 hp.

PB 7000-2—High-Speed (Four or more pole) Induction Motors, 500-9000 hp.

PB 1400-6—Weather-Protected Motors, both Induction and Synchronous, 50 to 4000 hp. This is the latest descriptive bulletin on the outdoor-splashproof motor, so successfully pioneered by the Elliott Company.

Bulletin Y-39, two pages, describes the new Elliott tube gage designed especially for the accurate measure of inside diameters when rolling small condenser and heat exchanger tubes. Data on size and price is included.

### District Offices



O. M. Sievert became Kansas City district manager on September 1. He joined the company in 1944 after graduating from the Missouri School of Mines. After serving two years as an officer in the Navy, he was assigned to the Cincinnati office as a field engineer in 1947. He went to the Kansas City office January 1, 1953 and became assistant district manager in July of the same year.

M. M. Williamson, who has been an application engineer in the large turbine department in Jeannette for the past several years is now a field engineer in the St. Louis district office.

E. F. Downey has transferred from application engineering in the Industrial Motors division to the Charlotte office where he is a field engineer.

H. W. Honefenger, St. Louis district manager for Elliott Company, was director and program chairman of the 18th annual meeting of the Missouri Society of Professional Engineers held at Hotel Statler in St. Louis, October 21-23.

### Engineering Paper

J. W. Glessner, aerodynamics design section of Elliott Company's development engineering department, presented a paper entitled "A Method for Analyzing the Stresses in Centrifugal Impellers" at the 1954 annual ASME Meeting in New York on Wednesday, December 1. He gave a preview of the paper before the Pittsburgh section of ASME on Tuesday, November 23.

### Jeannette

J. M. Tennant has been appointed manager of a-c application engineering, and Philip Scarola, manager of d-c application engineering in the industrial motor division at Jeannette. Before joining Elliott in 1953 as an application engineer, Mr. Tennant had a background of many years experience in the industrial motor field. Mr. Scarola started with Crocker-Wheeler in 1942 and came to Elliott in 1949 with the acquisition of Crocker-Wheeler. He has been an application engineer in the company's Pittsburgh office for the past five years. During World War II he served in the United States Navy.

### Hurricane Carol Hits Boston

To be in style this season you must have a hurricane picture. So we were glad when Hal Kinsel, our Boston district office manager, sent us this picture of the rear entrance of their new office and warehouse building. The hurricane hit August 31 and this picture was taken a few days later after phone and electric service had been restored. The city park department was so swamped in their tree work that they hadn't removed this big fellow from our property by November 5.



Copyright, 1954, Elliott Company, Jeannette, Pa.