

RIGHT DRAFT

ALLIS-CHALMERS

POWER PLANT CONTROL

...Stepless, Wide Range Speed Control of Direct Coupled Draft Fans

When Type 257 Liquid Rheostats control the speed of boiler fans driven by wound rotor motors you get:

- Immediate response to varying draft conditions.
- Smooth, continuous, stepless speed control.
- Equal sensitivity over the entire operating range.

HOW IT WORKS. Motor speed is varied by increasing and decreasing resistance. This is accomplished by raising and lowering electrodes and the level of current-carrying electrolyte. A pilot device transmits draft condition to a lifting mechanism which controls electrode position and electrolyte level. A full resistance range is provided in only 10 inches of electrode travel. The basic principle of liquid rheostat operation plus the utilization of specially engineered electrodes gives a linear relationship between motor speed and electrode travel over the complete rheostat range.

Since the rheostat is not mechanically connected to the motor it may be located to suit the most convenient plant layout. For complete details, contact your Allis-Chalmers representative or write for leaflet 1457344.

A-404

ALLIS-CHALMERS

Milwaukee 1, Wisconsin



Power

P. W. SWAIN Editor

Executive Editor
L. N. ROWLEY
Contributing Editor
J. A. ANNETT
Associate Editor
S. M. BIONKA
Associate Editor
T. O. WICKES
Associate Editor
T. C. MCCABE
Associate Editor
J. O. O'CONNOR
Associate Editor
E. G. A. SKROIZKI
Associate Editor
C. F. SANDERS
Assistant Editor
C. F. MARSHALEK
Art Editor

DOMESTIC NEWS BUREAUS: Atlanta, Cleveland, Detroit, Houston, San Francisco, Washington
WORLD NEWS OFFICES: London, Paris, Frankfurt, Tokyo, Manila, Rio de Janeiro, Mexico City

SHELTON FISHER Publisher
CLARK BOUGHTON Sales Manager

DISTRICT MANAGERS

W. W. QUARLES, 320 W. 42nd St., New York 36, N. Y.
C. E. LONO, Architects Bldg., Philadelphia 3, Pa.
E. E. SLATER, 120 Park Square Bldg., Boston 16, Mass.
W. K. PENDER, 1210 Hanna Bldg., Cleveland 13, Ohio
L. W. BOWEN, 220 N. Michigan Bldg., Chicago 11, Ill.
E. E. DEAN, 155 Pennsylvania Bldg., Detroit 24, Mich.
E. J. MCGUIRE, Continental Bldg., St. Louis 8, Mo.
J. H. CASH, First National Bank Bldg., Dallas 1, Tex.
JOHN OTTENSCHNIG, 40 First St., San Francisco 4, Calif.
J. H. ALLEN, 1111 Wilshire Blvd., Los Angeles 17, Calif.

...with Power readers...

WANT POWER VOLUMES?

Often I notice someone asking to get back issues of *Power*. I have every issue from 1930 up to date. The 1930 to 1936 issues were condensed recently and made into one volume exclusive of most advertising. The 50-year June issue, 1934, is intact. The 1936, 1937, 1938 and 1939 issues have all advertising removed. From 1940 on, the January and December issues are intact, being used for the outside binders of the ten issues which have most of the advertising removed. Condensed as they are, the volumes are 5 ft wide.

Salem, Oregon
If you're interested in filling out missing sets of *Power*, and want to purchase volumes from reader Riley, you can reach him directly at Route 5, Box 404, or you can write to us and we'll forward your offer to him at Salem, Oregon.—Eo.

THOSE BEGINNINGS... Sorry I can't be of any help in locating copies of *Steam*, as you requested in August *Power*, but just to be contrary if nothing else, I thought I'd drop you a line on the subject anyhow.

Under the heading "Are we older than we thought?" you say that all indications point to the year 1880 as the starting date (Continued on page 222)

...lines and bylines

ENGINEERING runs in the Sims blood—"JB" who tells about his Grand Haven diesel plant (pp 75-77) has an 83-year-old engineer father and a son who is electrical engineer for Kalamazoo Vegetable Parchment Co. Betting in the family is that grandson JB III, now one year old, will also grow up in the engineering mold.

Our JB was born and educated in Texas (Texas A&M) but worked for large engineering firms in all corners of the U.S. Now settled firmly in Michigan, he has made the Grand Haven municipal plant widely known for efficient operation and for the economical use of heavy residual fuel oils.

Always interested in aviation, JB helped the editor of his hometown paper build a Bleriot monoplane, flew World War I "Jennys" and still flies—both as a hobby and as a means of getting around the state, where he does consulting work in power engineering.



J. B. Sims

HIGH-PRESSURE PUMPS are the current concern of Hans Gartmann, as you can tell from his article on pp 71-74. Now chief engineer of DeLaval's centrifugal pump and compressor departments, he has held important design posts with that company since 1924.

Born and educated in Switzerland (Winterthur College, BS in ME, 1923), Gartman began his engineering career as a compressor calculator for Brown Boveri at Baden.

Hans makes a hobby of lawn bowling and enjoys boating and fishing with his children (a boy and a girl) during summer week ends at their cottage at Beach Haven Park, N. J. A member of numerous engineering societies (Naval Architects and Marine Engineers, Naval Engineers), he has served as chairman of the Trenton subsection of ASME (1946-47) and president of the Engineers Club of Trenton (1949-50).



Hans Gartmann

PSYCHOLOGIST with an engineering outlook is Dr. B. J. Covner, author of the article on "human engineering" beginning on p 84. Hailing from Rochester, N. Y., Dr. Covner holds degrees from Colgate (AB) University of Pennsylvania (MA) and Ohio State (PhD). His experience includes a wide variety of industrial psychological activities.

During World War II he was civilian consultant at precommissioning-training engineering school where he built a mock-up boiler and engine room to aid training of naval engineering personnel. His recent work has taken on an additional dimension—how to design engineering equipment for ease, accuracy and safety in operation, what is coming to be called human engineering. In this field, he and his associates have worked with utilities, industrial companies and insurance organizations.

Dr. Covner first made acquaintance with electrical equipment as a radio "ham"—was licensed at age 15 and operated W8AWD until World War II. Now likes to write, fish, listen to classical music.



B. J. Covner