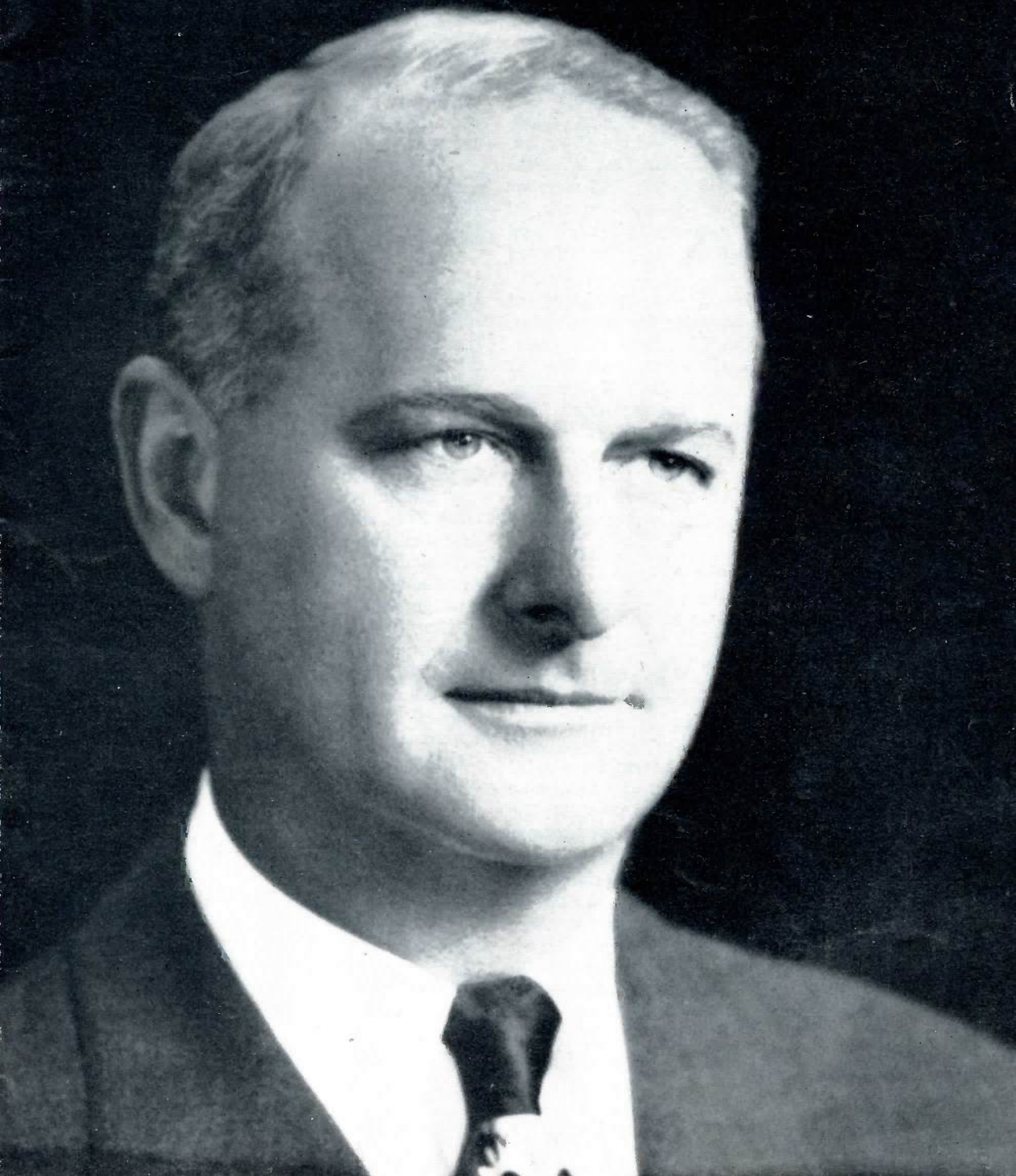


MUELLER *Record*

NOVEMBER • 1954



Around the Gas Industry

Arden Takes Over As Gama President

T. T. ARDEN, Los Angeles industrialist, was installed as president of the Gas Appliance Manufacturers Association at the group's annual board meeting October 10 in Atlantic City.

Arden, executive vice president of the Robertshaw-Fulton Controls Co., Lynwood, Calif., a Los Angeles industrial suburb, succeeds Sheldon Coleman, president of The Coleman Co., Wichita, Kansas, as head of the 600-member trade group which manufactures 98 per cent of the gas appliances and equipment produced in the United States.

W. F. Rockwell, Jr., president of Rockwell Manufacturing Co., Pittsburgh, now becomes GAMA's first vice president and A. B. Cameron, president of Ruud Manufacturing Co., Kalamazoo, Michigan, is second vice president. Lyle C. Harvey, president of Affiliated Gas Equipment, Inc., Cleveland, will continue to serve as treasurer and H. Leigh Whitelaw of New York as secretary. He is also managing director of the association.

* * *

Record Shipments Of Gas Heat Units

SHIPMENTS OF GAS-OPERATED central heating equipment continued their climb toward new highs in September with a 19.6 per cent increase over the same month of last year for a total of 666,100 units during the first nine months of the year, according to the Gas Appliance Manufacturers Association.

All three types of gas equipment—furnaces, boilers and conversion burners—recorded the highest marks since September of 1950, the nation's biggest building year, according to Edward R. Martin, GAMA's director of marketing and statistics.

E. Russell Griffith Named A.G.A. Research Engineer

E. RUSSELL GRIFFITH, formerly associated with the Gas Department of Ford, Bacon and Davis, Inc., has joined the American Gas Association as research engineer. He will assist T. L. Robey, coordinator of research for A.G.A. under the gas industry's coordinated promotion, advertising and research plan. Mr. Griffith will be employed primarily on pipeline research work on which the industry is spending nearly a quarter of a million dollars yearly. In addition to this sum, other research activities carried on under the A.G.A. PAR Plan, call for expenditures of about \$750 annually.

* * *

Ohio Fuel Seeks To Improve Storage Operations

THE OHIO FUEL GAS COMPANY, of Columbus, Ohio, has filed an application with the Federal Power Commission requesting a certificate authorizing the construction of 10.6 miles of 20-inch pipeline and an 880-horsepower compressor station to help improve its underground natural gas storage operations in Ohio.

The 10.6 miles of line would be located in Hocking and Fairfield Counties, in the company's Benton storage area. Ohio Fuel said that construction of the line would eliminate the restrictive effect of existing transmission facilities and provide adequate capacity for required storage withdrawals.

The new compressor station, to be built in Ohio Fuel's Guernsey storage area in Guernsey County, is required for efficient development and utilization of existing storage facilities, the application states.

Total estimated cost of the proposed new facilities is \$942,900.

* * *

Educational Service Bureau Publishes 2 Science Books

THE EDUCATIONAL SERVICE BUREAU of the American Gas Association has published the first two books in a series of six booklets designed to show the application of scientific principles

(Continued on Page 23)

Recording Our Thoughts

OUR COVER THIS MONTH pays tribute to F. M. Banks, president and general manager of the Southern California Gas Company, Los Angeles, California. A leader in the gas industry for many years, Mr. Banks was elected president of the American Gas Association at the thirty-sixth annual convention of the Association held in Atlantic City, New Jersey, October 11, 12 and 13.

* * *

GAS INDUSTRY ACCIDENT frequency and severity rates have decreased 41 per cent and 32 per cent respectively during the period 1947-1953, according to an announcement by the American Gas Association.

Gas in itself rates very low as a cause of accidents among the industry's employees, the Association points out. Like other industries, however, the gas industry must contend with run-of-the-mill industrial accidents, many of which do not involve gas at all.

The AGA noted that all accidents tend to occur in patterns. Case histories show that human personality is a vital factor in such patterns. A man's background and environmental relationships have a direct bearing on his accident record, and they cannot be left out of the reckoning in any program designed to reduce employee accident rates.

Supervisory personnel are key men in any safety program, the AGA report said, and therefore any accident prevention plan must stand or fall on the thoroughness of their understanding of it and the quality of their enthusiasm for it.

A new safety course, designed to give foremen, supervisors and superintendents a thorough grounding in modern accident prevention techniques, has been developed for the gas industry by the AGA. The new course, "Accident Prevention Through Informed Supervision," channels accident prevention fundamentals directly to supervisory employees.

The aim of the gas industry is to make the industry the safest in America. This new accident prevention course is a sizable step toward the accomplishment of that goal.

* * *

WHILE THERE IS NO method of accurately measuring the part played by Mueller Co., adoption of the use of Mueller No-Blo equipment certainly can be credited with having some part in the reduction of accidents among gas industry employees. In addition, this equipment also has increased the safety of the consumer, another group of which the gas industry is vitally interested.

It is perhaps significant that Mueller No-Blo equipment was widely accepted and placed into use throughout the nation during this same period, 1947-1953.

* * *

CLEM D. JOHNSON, president of the Chamber of Commerce of the United States, recently blasted the Kremlin's accusation that the American business man is a war-monger as the "greatest canard of the twentieth century."

Actually, he said, a peaceful world is the greatest hopes of the American business community. "If we laid all other considerations aside," Mr. Johnson asserted, "logic alone would dictate our hope for peace. Our industry would be the prime target for attack in the event of another war—as every thinking person knows."

In a third great war, he said, there would be no dividing line between the battle front and the home front. Industry is the front line in modern war.

"Further," Mr. Johnson stated, "war invites controls on business, and they are harder to get rid of than the seven year itch. War kills or maims the men that business needs worst—the skilled and the talented. Nobody wins a modern war.

"Give us a dozen years of peace," Mr. Johnson said, "and American business and industry will lead the world to a golden age of prosperity and plenty."

W. H. Hipsher Cites Need For Better Understanding Among Western Nations

(Editor's Note: W. H. Hipsher, executive vice president of Mueller Co., Decatur, Illinois, manufacturer of gas and water distribution equipment, was chosen as a delegate to the Second International Conference of Manufacturers which was held in Paris, France.

Mr. Hipsher traveled throughout the Benelux Nations, visiting manufacturers and exchanging views on manufacturing methods and procedures and employee relations. His comments reflect the need for closer association and better understanding among members of the Western World.)

By W. H. Hipsher

WHEN our founding fathers were debating the Declaration of Independence, Benjamin Franklin made one of his famous remarks which went like this:

"We must indeed all hang together or most assuredly we shall all hang separately."

There must be a basic truth in Benjamin Franklin's remarks that applies to all the nations of the Free World today. The Iron Curtain countries under Communism have made (let's face it) some gains in power. This should not create fear in the minds and hearts of the peoples of the Free World, so long as we maintain faith in our ability to muster our strength, economic and military, and remain true to our God-given freedom and way of life.

This thought of the urgent need for Free World unity was very strong in the minds of those American industrialists who organized the First International Conference of Manufacturers in



W. H. HIPSHER
Executive Vice President
Mueller Co.

New York City in December of 1951. This represented the first organized effort to bring together members of top levels of industrial management in the Western Community of Nations for an exchange of views and experiences.

Perhaps unity was even more apparent in the minds of the European and American business men at the Second International Conference of Manufacturers held in Paris, May 23, 24 and 25 of this year. I was a member of that Conference and I know the conviction that "free men must hang together" was very much in their minds throughout all of our discussions.

The Paris Conference was attended by 362 industrial leaders from thirteen Western European countries and the

United States. The American delegation of more than 150 represented a cross section of all types of American industry in every part of our great country.

Conference agendas are not too interesting but I believe it is necessary to at least make some comment on them. The theme of the conference appeared in rather imposing words, "ECONOMIC AND SOCIAL CONDITIONS FOR THE DEVELOPMENT OF FREE ENTERPRISE".

The topic of human relations was discussed at great length and was deemed of utmost importance. The very fact that the subject of human relations, that is, employer-employee relations, occupied an important place at the conference table, is an important reflection on the Free World. It is proof that our belief in individual rights and individual freedom is of utmost importance in maintaining a Free World.

It is also most important that both in the United States and in Europe there is a desire on the part of top management to place more and more emphasis on human factors in business.

We have never lacked the "Know How" to find new products, new machines and new techniques. Our technological advancement is a reality, but the real key to our future is people—people who do not stop with technological progress alone, but people who learn to earn a better living and, at the same time, apply the principle of free enterprise and individual initiative to their own lives.

Improving relations among human beings depends on our ability to communicate freely and effectively with each other. Therefore, to develop communication between management and employee was a topmost subject for discussion. This brought us into the field of benefit programs, such as health and safety, including means for prevention of accidents and competent treatment of occupational injuries.

From the beginning of our technological advancement in industry, we have been reducing hard physical labor and drudgery. We have built machines to do jobs that used to require heavy muscular work and, while it has been a

most important advancement, this group of manufacturers, as they sat around the conference table, were well aware of the fact that it is not enough that we remove much of the hard physical work in industrial jobs. As a people, we need to increase our mental power rather than our muscular power. Our technological advancements have brought about a tremendous increase in the requirement for trained and educated people in business today. This means that education must pay an increasingly important part in our industrial society in the years to come. I believe every man attending this conference was fully aware that this was a most important aspect of the discussions then in progress.

In reviewing some of the highlights of the Second International Conference of Manufacturers, I will not pretend that we of the American delegation and our European colleagues saw eye-to-eye on every point.

Perhaps, the subject of private enterprise in government was a prime example of a divergent point of view. In America, we believe that government regulation of certain aspects of private enterprise may be necessary in the public interest. However, government competition with private enterprise can be a major obstacle to the flow of private capital; that same private capital which creates jobs and goods and services. Our American political society was founded on our enlarged vision of individual liberty which gives opportunity in a new form of economic system, one which is conducted on a much freer basis. It was not, therefore, surprising that some of our European friends were not entirely in agreement with the American viewpoint. In order to create an economic system which will flourish with private enterprise, government must regard its functions as primarily political rather than economic.

The American delegation did not sit around the conference table to tell our European friends how to run their business. We were there to try to find solutions to mutual problems and to strengthen the bonds of friendship and understanding among our peoples. The American delegation felt it had to give its frank opinions on the role of gov-

ernment and the nature of free competition, subjects in which the European manufacturers' views were not at all times the same as ours.

We believe, for example, when governmental activities invade the field of private enterprise it threatens other elements, such as civil rights and civil liberties. It is unfortunate to find some of our European friends quite content to see government assume certain economic responsibilities, such as maintaining full employment, subsidizing industry and controlling operations of certain industries.

It is impossible to predict whether the views expressed by the American delegation will eventually have an influence on the course of European economic thinking. Naturally, we believe in American ideas and have expressed them to our European friends, hoping that the Free World will move toward greater freedom with less governmental intrusion, and perhaps above all, vigorous competition among individual businesses and industries.

Prior to the beginning of the Paris Conference, the American delegation was split off into different groups to hold regional conferences with manufacturers in:

- Scandinavia
- The Benelux Countries
- Great Britain
- France
- Germany
- Italy
- Switzerland
- Austria

I was assigned to the Benelux Regional Group. It would be impossible, in the space allotted, to report the splendid hospitality this group of manufacturers in the Benelux area extended to us. We visited manufacturing facilities in Holland, Belgium and Luxembourg and we had the opportunity to see some of the most modern, well-managed industrial establishments that I have ever seen. The devastation to the Benelux area during World War II was tremendous but their comeback has been absolutely miraculous. These countries have used our aid for rebuilding the old and constructing new production facilities. And, they are now producing good products on a mass production

basis. The people of the Benelux area are to be respected for their courage and vision, so apparent in the rehabilitation of their countries after the close of World War II.

As a summary, I believe the achievements of the Second International Conference of Manufacturers were considerable. Numerous, specific problems were discussed with a free, frank interchange of views. We and our European friends got to know each other better and I am sure all of us agree that none of the free nations can be self-sufficient either politically, militarily or economically. Surely this conference could not solve all of our problems. Many of them are too big and too complex for any overnight solution. I believe, however, that we reached a fuller unity and understanding and a desire "not to hang separately but to hang together".

**Katherine L. Rathbone Appointed
A.G.A. Home Service Chairman**

KATHERINE L. RATHBONE, home service supervisor of the Southern Counties Gas Company of California, has been appointed by W. H. Kurdelski as chairman of the 1955 A.G.A. Home Service Committee.

Miss Rathbone directs the work of 20 home economists in the home service program of the Southern Counties Gas Company which in its eight operating divisions serves 120 towns and cities in southern California. One of the major projects is the spring and fall series of The Gas Company Cooking Revue which as a dealer cooperative program reached in the spring series 29,000 homemakers in 15 areas.

Miss Rathbone is a graduate in home economics from Washington State College at Pullman. She is active in home economics organizations, serving this year as Convention Chairman for the State Association.

The minister was driving a nail in the wall when he struck his finger with the hammer.

"Hoover!" he cried.

"Why did you cry out Hoover?" his wife asked.

"Because Hoover is the biggest dam in the world."

Introducing:

**J. Frank Kellett,
Sales Assistant,
Chattanooga Plant**

J. F. KELLETT is a familiar name to most of our customers. Handling their correspondence is one of his principal duties, a function that has enabled him to become acquainted by mail with the thousands of people throughout the United States and abroad who do business with Mueller Co.

Mr. Kellett is assistant to Walter A. Coventry, assistant sales manager at our Chattanooga, Tennessee, plant. His rise through the ranks of Mueller Co. has been rapid. It was just six years from the time Mr. Kellett was employed as a billing clerk until he attained his present position as the No. 2 man in Chattanooga's Sales Department.

His career with our firm began on April 1, 1947, as billing clerk; however, only nine months elapsed until his first promotion to order expediter. As expediter, he dealt first-hand with our customers on specific orders. It was his responsibility to make every effort to get a customer's order to him on schedule.

A second promotion came on February 13, 1950, when he was named quotation clerk and supervisor of Sales Department Billing. On April 1, 1951, he again was promoted, this time to assistant division sales manager, and on December 1, 1953, he was advanced to his present position.

As assistant to the assistant sales manager, Mr. Kellett handles all quotations for our customers and sales representatives. He assists in the handling of debits and credits and has charge of correspondence to customers and sales representatives regarding inquiries and invoices. He checks prices and discounts on customers' and sales representatives' orders before they are interpreted and, as assistant to Mr. Coventry, he assists in supervising personnel.

Mr. Kellett was born July 13, 1923 in Holland, Georgia. He attended grade school and high school in Summerville,



J. F. KELLETT

Georgia, and later attended Gordon Military College at Barnesville, Georgia, for four months before entering military service in 1942.

He attended Western Kentucky State Teachers College at Bowling Green, Kentucky, for six months while awaiting assignment to Air Force Cadet Training. For three years Mr. Kellett served as a P-47 fighter pilot with the First Air Force.

In 1945, he was discharged from the Air Force and entered the University of Chattanooga where he studied Business Administration. He left school on April 1, 1947, to join Mueller Co.

He was married to Virginia Chapman on September 23, 1944. They have one daughter, Ginger born March 24.

Frank, as he is known to his friends, says his only hobby is playing softball with the Mueller Co. team at Chattanooga. He occasionally likes to play a round of golf. He is interested in all sports and during his high school days he was an outstanding athlete. Good enough, in fact, to be named Georgia All-State high school football center during his senior year in 1941. In addition to his brilliant football career, he was a varsity member of his school's basketball and baseball teams.



F. M. BANKS
President



DEAN H. MITCHELL
1st Vice-President



C. H. ZACHRY
2nd Vice-President



VINCENT T. MILLS
Treasurer

F. M. Banks Elected AGA President At 36th Annual Meeting Oct. 11-13

F. M. BANKS, president and general manager, Southern California Gas Company, Los Angeles, California, was elected president of the American Gas Association at the thirty-sixth annual convention of the Association held in Atlantic City, N. J., October 11, 12, and 13.

Other officers of the Association elected were: Dean H. Mitchell, president, Northern Indiana Public Service Company, Hammond, Indiana, first vice-president; C. H. Zachry, president, Southern Union Gas Company, Dallas, second vice-president; and Vincent T. Mills, treasurer, Long Island Lighting Company, Mineola, New York, treasurer.

The American Gas Association is the national trade association of the thirteen and one-half billion dollar gas industry. Its member companies include the leading gas utility and pipeline companies, and gas appliance and gas equipment manufacturing companies in the United States and Canada. More than 5,000 delegates

from all parts of the North American continent attended the three-day conference.

Mr. Banks attended Riverside College, in California; the Colorado School of Mines, and Massachusetts Institute of Technology. He received a B.S. degree in Electro-Chemical Engineering and did special work in business administration.

He joined the civil engineering department of Southern California Gas Company in 1922, and was appointed sales superintendent, Eastern Division, the same year. In 1925, Mr. Banks was made assistant to the new business manager. From 1926 to 1930, he was assistant general manager of the Riverbend Gas & Water Company, the Central Counties Gas Company, and Hanford Gas & Power Company. He became manager of the San Joaquin Valley division in 1930 and later in the same year was made general superintendent of sales for Southern California Gas Company.

Mr. Banks was elected a vice-president and director of Southern California Gas

Company in 1934 and from that time until 1948 he directed sales, advertising, public relations, customer relations and service for the company. In 1948 he became vice-president and assistant general manager, and was made general manager in 1949. He was elected president and general manager of the company in 1950.

He has been active in gas industry affairs for many years and he is a former president and director of the Pacific Coast Gas Association. He has served on the Executive Committee and the Board of Directors of the American Gas Association and last year was elected its first vice-president. He has headed many important A.G.A. committees.

Members of the Association elected the following directors and chairmen of sections at the annual convention.

For Director—two year terms expiring October 1956:

Ernest R. Acker, president, Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y.; Dudley B. W. Brown, president, Milwaukee Gas Light Co.; F. D. Campbell, president, New England Gas & Electric Association, Cambridge, Mass.; Stuart Cooper, president, Delaware Power & Light Co., Wilmington, Del.; N. Henry Gellert president, Seattle Gas Company; Paul Kayser, president, El Paso Natural Gas Co.; Donald C. Luce, president, Public Service Electric & Gas Company, Newark, N. J.

Also elected directors for two years were: H. N. Mallon, president, Dresser Industries, Inc., Dallas; James F. Oates, chairman, The Peoples Gas Light & Coke Co., Chicago; C. P. Rather, president, Southern Natural Gas Company, Birmingham, Alabama; Henry B. Sargent, president and general manager, Arizona Public Service Co., Phoenix; E. Carl Sorby, vice-president, Geo. D. Roper Corp., Rockford, Ill.; W. T. Stevenson, president, Texas Gas Transmission Corp., Owensboro, Ky.; E. H. Tollefson, president, Hope Natural Gas Co., Clarksburg, West Va., and George E. Whitwell, vice-president in charge of sales, Philadelphia Electric Co., Philadelphia, Pa.

Chairmen and vice-chairmen of the various sections of A.G.A. elected were as follows:

Accounting Section; chairman: A. T. Gardner, vice-president and secretary, Delaware Power & Light Co., Wilming-

ton; vice-chairman: E. R. Eberle, assistant to general commercial manager, Public Service Electric & Gas Co., Newark; General Management Section; chairman: Larry Shomaker, vice-president, Northern Natural Gas Co., Omaha; vice-chairman: John H. Carson, vice-president, The East Ohio Gas Co., Cleveland; Industrial and Commercial Gas Section; chairman: Ray Trowbridge, commercial and industrial sales manager, Seattle Gas Co.; vice-chairman: Lawrence E. Biemiller, manager, industrial fuel department, Consolidated Gas, Electric Light & Power Company of Baltimore; Operating Section; chairman: Walter H. Davidson superintendent of operations, Transcontinental Gas Pipe Line Corp., Houston; 1st vice-chairman: J. H. Collins, Sr., New Orleans Public Service, Inc.; 2nd vice-chairman: Frederic A. Hough, vice-president, Southern Counties Gas Company Los Angeles; Residential Gas Section; chairman: Walter H. Kurdelski, sales manager, Michigan Consolidated Gas Co., Grand Rapids; and vice-chairman: B. H. Whittmann, assistant to vice-president in charge of sales, The Peoples Gas Light & Coke Co., Chicago.

Convention Highlights . . .

Home Service Representatives Win National Awards

INDIVIDUAL ACCOMPLISHMENTS in the gas utility home service field were accorded national recognition when five winners were presented with American Gas Association Achievement Awards sponsored by McCall's Magazine. Cash prizes totalling \$1,000 and bronze plaques were awarded to individual members of home service organizations judged to have made the most effective contributions on the basis of papers submitted, to the advancement of modern homemaking by promoting the use of gas and modern gas equipment.

The awards were made by E. H. Eacker, president, A.G.A., and president, Boston Consolidated Gas Company.

The five awards were made to representatives of companies falling in three divisions. Recipients of these national honors were: Mrs. Mary Louise Bohn, home service director, Laclede Gas Company, St. Louis, Mo.; Miss Marjorie T. Chandler, home service director, The Consumers' Gas Company of Toronto, Toronto, Canada; Miss Dorothy Farrell, assistant home economics director, The Manufacturers Light and Heat Company, Pittsburgh, Pa.; Miss Ida Lansden, staff assistant, Home Service Department, Washington Gas Light Company; and Mrs. Eleanor V. Wiese, supervisor, Home Economics Department, Public Service Electric and Gas Company, Newark, N. J.

The judges of the Awards were: W. H. Kurdelski, Michigan Consolidated Gas Company, Grand Rapids, chairman; D. R. Schively, The Hartford (Conn.) Gas Company; Mary E. Huck, The Ohio Fuel Gas Company, Columbus; Elizabeth J. Lynahan, The Peoples Gas Light and Coke Company, Chicago; and Irene Muntz, Rochester (N.Y.) Gas and Electric Corporation.

Mrs. Mary Louise Bohn was winner in Division "A" which includes heads of home service departments of more than five individuals. She was cited for her description of department organization in which the accent has been placed on good service and good public relations. She received a cash award of \$200.

In Division "B" which was confined to home service departments of five or less members, the Award was given to Miss Marjorie Chandler for an effective contest developed through cooperation between The Consumers' Gas Company and the Toronto Board of Education to interest high school girls in home economics as a career. The cash award for this division also was \$200.

Three awards of \$200 each with bronze plaques given in Division "C" to individual members or department heads of three different companies.

Miss Ida Lansden was one of the winners in this division for her outline of the part played by home service of Washington Gas Light Company in the

Mrs. America contest in which telecasts of contestants at work were given for the public. Another winner in Division "C" was Miss Dorothy Farrell who won her Award for an account of a gas incineration campaign developed by The Manufacturers Light and Heat Company to interest civic clubs in community betterment.

The third winner in this division was Mrs. Eleanor V. Wiese. This Award was given on the basis of proof that a Heart Kitchen-Laundry display as a community service in New Jersey also paid off in better planned builder-architect kitchens and laundries.

* * *

Earl J. Jacobs Wins Industry's Top Honor

EARL J. JACOBS, an employee of the Michigan Wisconsin Pipe Line Company, Detroit, Michigan, was given the highest honor that the gas industry can bestow on an individual for outstanding bravery. He was presented with the Meritorious Service Medal of the American Gas Association. The Award was presented to Mr. Jacobs by E. H. Eacker and consists of a gold medal, a button and a certificate of merit.

Mr. Jacobs won the Award for conspicuous bravery on October 27, 1953, when he rescued a fellow worker overcome by fumes while cleaning a natural gas dehydration vessel. Mr. Jacobs descended into the vessel and lifted the unconscious man so fellow workers could pull him out, thus endangering his own life from the fumes. Although he was weak from the fumes, Jacobs remained to help revive the stricken man, then assisted in bringing him down from the platform for oxygen treatment.

* * *

Brooklyn, Pittsburgh Engineers Share A.G.A. Merit Award

MICHAEL ANUSKIEWICZ, engineer of development and planning, The Brooklyn Union Gas Company, and George C. Dormer, assistant chief engineer, The Manufacturers Light and Heat Company, Pittsburgh, shared one of the

highest honors given in the gas industry. Both were selected as recipients of the Beal Medal Award of the American Gas Association presented annually to the individual or individuals who were authors of the most outstanding technical paper during the preceding year. Such a paper must have been delivered before an annual meeting, school, conference, or convention of the Association, or printed in the A.G.A. MONTHLY, the Association's magazine. The presentation was made by E. H. Eacker.

The Beal Award is the oldest established award of the American Gas Association. It consists of a cash prize and an engraved medal. The award was originated by the late W. R. Beal, and now is sponsored by Ernest R. Acker, president, Central Hudson Gas and Electric Corporation, Poughkeepsie, New York.

This year the award committee reviewed 32 technical papers. Two were considered of equal merit and the cash award was divided and each winner received a medal.

George C. Dormer was honored for his paper, "Practical Problems of Odorization," presented at the Operating Section's Chemical, Engineering and Manufactured Gas Production Conference in Pittsburgh, and Mr. Michael Anuskiewicz was cited for a paper, "Development of an Overpressure Protection Program for a Distribution System," presented at the 1954 Distribution, Motor Vehicles and Corrosion Conference of the Operating Section in Montreal, Canada.

* * *

Fred H. Bunnell Receives A.G.A. Distribution Achievement Award

FRED H. BUNNELL, general gas distribution supervisor, Consumers Power Company, Jackson, Michigan, received the American Gas Association Distribution Achievement Award sponsored by the American Meter Company, Philadelphia, Pa. The presentation was made by E. H. Eacker.

The Distribution Achievement Award comprises a Certificate of Merit and a cash emolument of \$1000, presented

each year to the individual judged to have made the most outstanding contribution to the science and art of gas distribution in the past year or in the past five years.

Mr. Bunnell received the Award for his work in utilizing appliance regulators on customers' systems to increase distribution system capacity at minimum expense. Most manufactured gas companies converting to natural gas are faced with the problem of obtaining more capacity in distribution systems to meet increased load generated by the demand for additional space heating.

At Mr. Bunnell's suggestion, appliance regulators were installed in customers' homes ahead of the meter. These regulators maintain an even gas pressure of approximately 4 inch water column at the appliance. Operating departments, at the same time, can fluctuate gas pressure in distribution systems from six inch to as high as fifteen inch water column, thus providing sufficient gas for all customers' needs. This plan is of great importance to the gas industry since it provides means of giving additional capacity to gas systems.

* * *

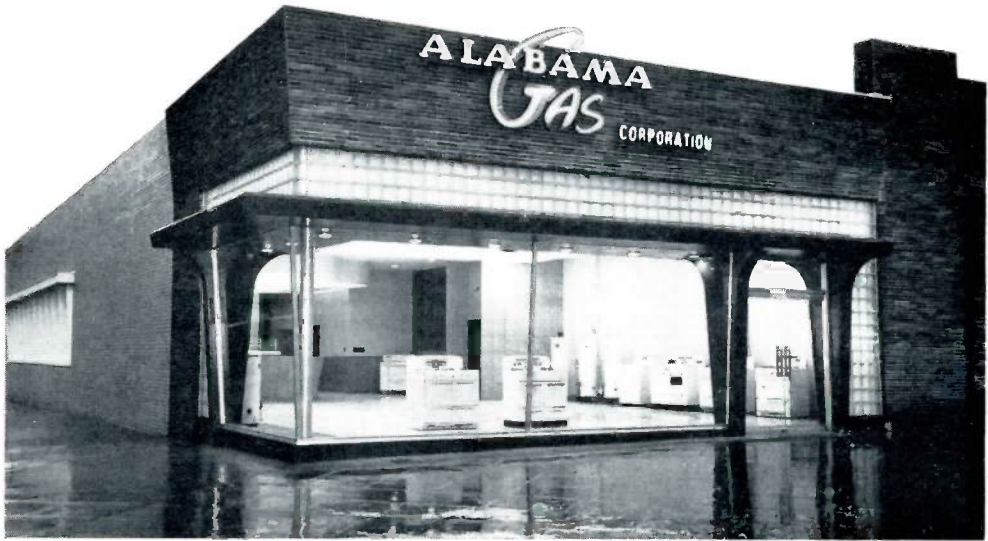
Charles H. Mann Receives Distinguished Service Award

CHARLES H. MANN, assistant treasurer, The Columbia Gas System, Inc., New York, N. Y., received the American Gas Association's Distinguished Service Award for his outstanding contributions to the gas industry. The Award was presented by E. H. Eacker.

The Distinguished Service Award, comprising an engrossed certificate and a substantial financial recognition, is one of the highest honors bestowed in the gas industry. It is given to the person whom the A.G.A. Board of Directors deems to have made individual contributions of a distinguished or outstanding character in the general interest of the gas industry.

Mr. Mann, as a member and as chairman of the A.G.A. Taxation Committee, and as a member and as vice-chairman of the A.G.A. Executive Committee on

(Continued on Page 18)



This office building is located at Tuscaloosa, Alabama.

100 Years of Service

ALABAMA GAS CORPORATION has maintained a continuous celebration during 1954 of its 100th anniversary of gas service. The original predecessor company began service February 7, 1854 in Montgomery, Alabama where it was incorporated with a subscribed capital stock of \$75,000 "to be increased to \$100,000 as the wants of the city of Montgomery may require." The company now pays about \$100,000 annually for its Montgomery city license.

The original company was known as the Montgomery Gas Light Company, later the Montgomery Light and Power Company, Montgomery Light and Water Power Company, Alabama Power Company, Alabama Gas Company, and now Alabama Gas Corporation.

During this one hundred years of service the company has grown from 26 gas lights to its present size of some 180,000 meters.

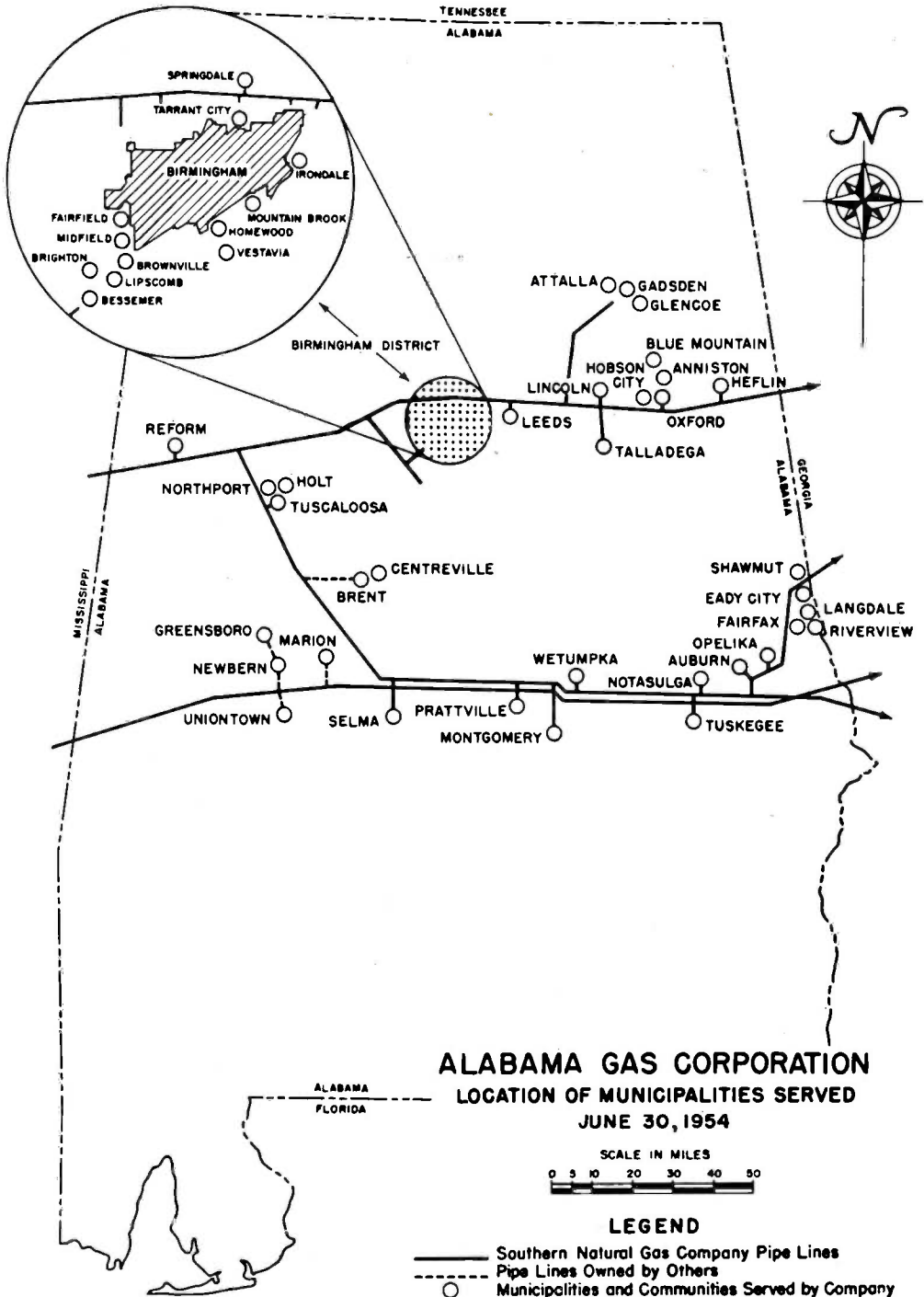
Alabama Gas now operates gas distribution systems in and adjacent to 47 municipalities and communities, all lo-

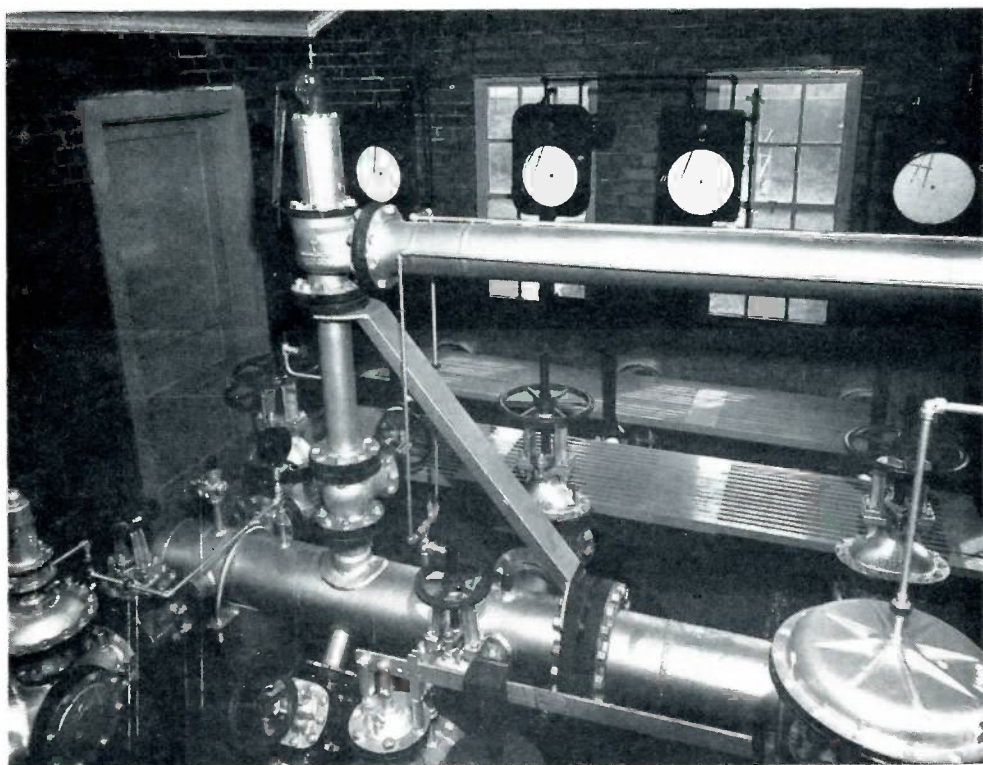
cated in Central Alabama. Its largest distribution system serves the Birmingham district, which comprises the City of Birmingham and twelve suburban municipalities. In the Birmingham district the company sells natural gas, coke oven gas and, at periods of peak demand occasioned by unusually cold weather, propane-air gas mixed with natural and coke oven gas. Outside the Birmingham district, the company sells natural gas in 34 municipalities.

The maximum send out on the company's natural gas system on any one day during the twelve months ended on



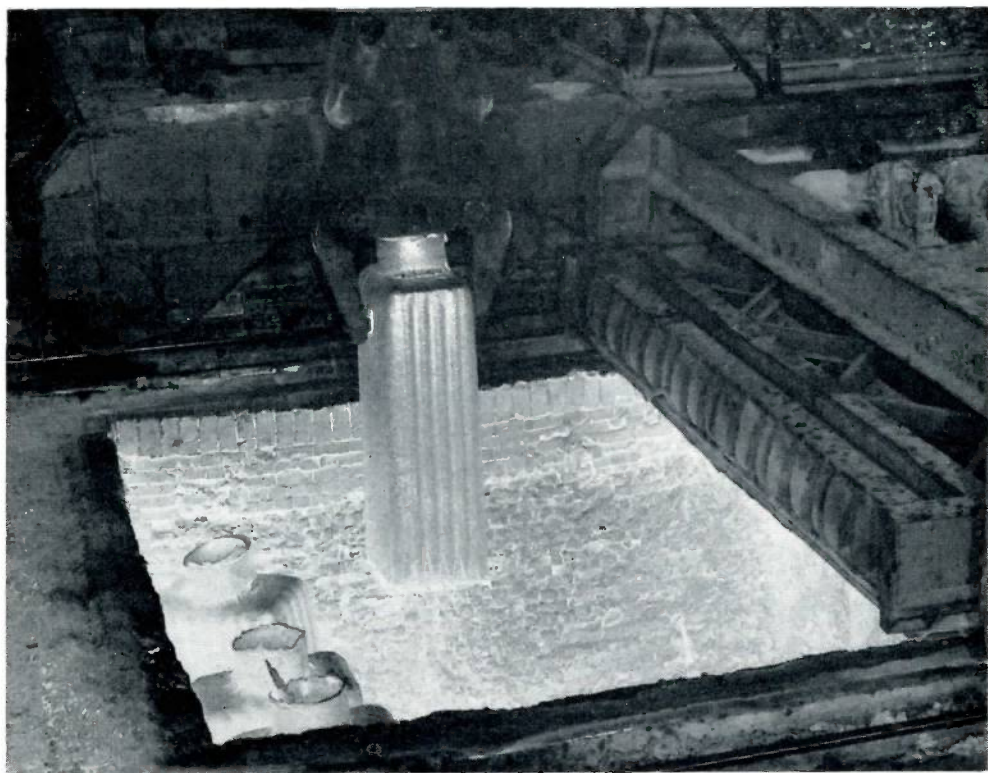
The approximate location of Alabama Gas Corporation's various distribution systems is shown on the map at right. Birmingham, the largest city served by the company, is the iron and steel manufacturing center of the Southeast. Montgomery, the capital of the state, is the second largest city served by the company. All of the municipalities served by the company are located within a radius of 125 miles of Birmingham.





A regulator and measurement station maintained by Alabama Gas.

Ingots being drawn from soaking pits at a local steel plant.





Birmingham's service center is shown above.

June 30, 1954 was 263,644 MCF and on the company's coke oven gas system on any one day during the same period was 36,744 MCF.

There has been a continuous long term increase in demands for gas in the territory served by the company, which has been partly due to the substantial increase in the level of industrial activity in that territory during the past decade. The growth of population and the demand for gas for residential use, particularly for house heating, have contributed to the increase.

Alabama Gas purchases its supply of natural gas under the terms of a contract with Southern Natural Gas Company and also has contracts for supplies of coke oven gas for delivery in the Birmingham district.

Alabama Gas properties which consist primarily of gas distribution systems serving 47 municipalities, include 2,133 miles of cast iron and steel mains and represents an investment of over \$38 million. The largest distribution system serves the Birmingham district. This system includes gas holders with an aggregate storage capacity of approximately 11,000 MCF and compressor stations totaling 1,600 horsepower, also storage capacity for 750,000 gallons of propane and plants for the generation of propane-air gas which is used to supplement gas supplies at periods of peak demand.

In Birmingham, Alabama Gas owns a home office building, a combination warehouse and office building; an automobile repair shop, and other property

and equipment used or useful in connection with the distribution and sale of gas in the Birmingham district. Alabama Gas also owns property and equipment outside the Birmingham district, including miscellaneous repair shops and warehouse facilities located in Anniston, Gadsden, Tuscaloosa, Montgomery. The Birmingham, Gadsden, Tuscaloosa, and Montgomery offices have recently been modernized to facilitate convenient, efficient handling of customer service matters.

The company employs approximately 1200 regular employees, all of whom are provided group life insurance. The company also provides group hospitalization insurance for the employees and their dependents. All employees are eligible for a Retirement Income Plan.

The executive officers of the company are: J. N. Greene, Chairman of the Board; H. R. Derrick, President; R. A. Puryear, Jr., Executive Vice President; J. H. Chenery, Vice President; Charles B. Gamble, Jr., Vice President; H. P. Jones, Vice President; R. C. Wirtz, Secretary; N. R. Kerredge, Treasurer. In addition to the officers, the company employs 21 men in the ranks of managers or superintendents.

During all the years Alabama Gas has operated, it has been a good industrial and community neighbor. Its gas is the predominant fuel in its territory. The men who work for the company, from Board Chairman Joseph N. Greene and President H. R. Derrick on down, have been active in civic promotion in each city served.

How Milwaukee Trains Servicemen

Mueller Co. Sales Representative Gives Three Lectures

(EDITOR'S NOTE: The Milwaukee Gas Light Co. is offering through the Milwaukee School of Engineering a technical training course free to its servicemen on all phases of their distribution and service problems in the field. In addition to instruction by the staff at Milwaukee School of Engineering, representatives of many firms have been invited to instruct servicemen. Companies ranging from manufacturers of appliances and hot water heaters to distribution and transmission regulators and governors were represented in the training program. Mueller Co. Sales Representative Cliff W. Auer delivered three lectures on the art of our No-Blo service connections and in addition gave a demonstration with our No. 1 line stopper equipment. The following article describing the training program appeared in the August 26, 1954, number of GAS AGE and is reprinted here through courtesy of the editors of that publication.)

* * *

UNDER what is believed to be the first company sponsored employee training program of its kind in the country, the Milwaukee Gas Light Co. is giving its servicemen free technical training at the Milwaukee School of Engineering.

When the men successfully complete the special gas service course, they will become eligible on a seniority basis for a newly created classification of Senior Serviceman. Sixty positions have been set up in that classification.

Only by taking the special technical courses can an employee qualify for the new classification, according to John J. Dolan, vice-president of the company in charge of personnel.

The company is paying all costs of the course, including tuition and textbooks. Employees attend school on their own time.

Most of the employees take night classes. Special day courses have been

set up for those working night shifts. Some servicemen go to school twice a week, others once. Some will finish their special training in two semesters, others in three or four semesters.

The length of time required to complete a training program depends upon how many courses a serviceman must take.

Each man's program has been based upon the results of special tests given recently to the servicemen. The tests, as well as the curriculum, were developed by the Milwaukee School of Engineering staff with the assistance of members of the school's 69-man Industrial Advisory Committee.

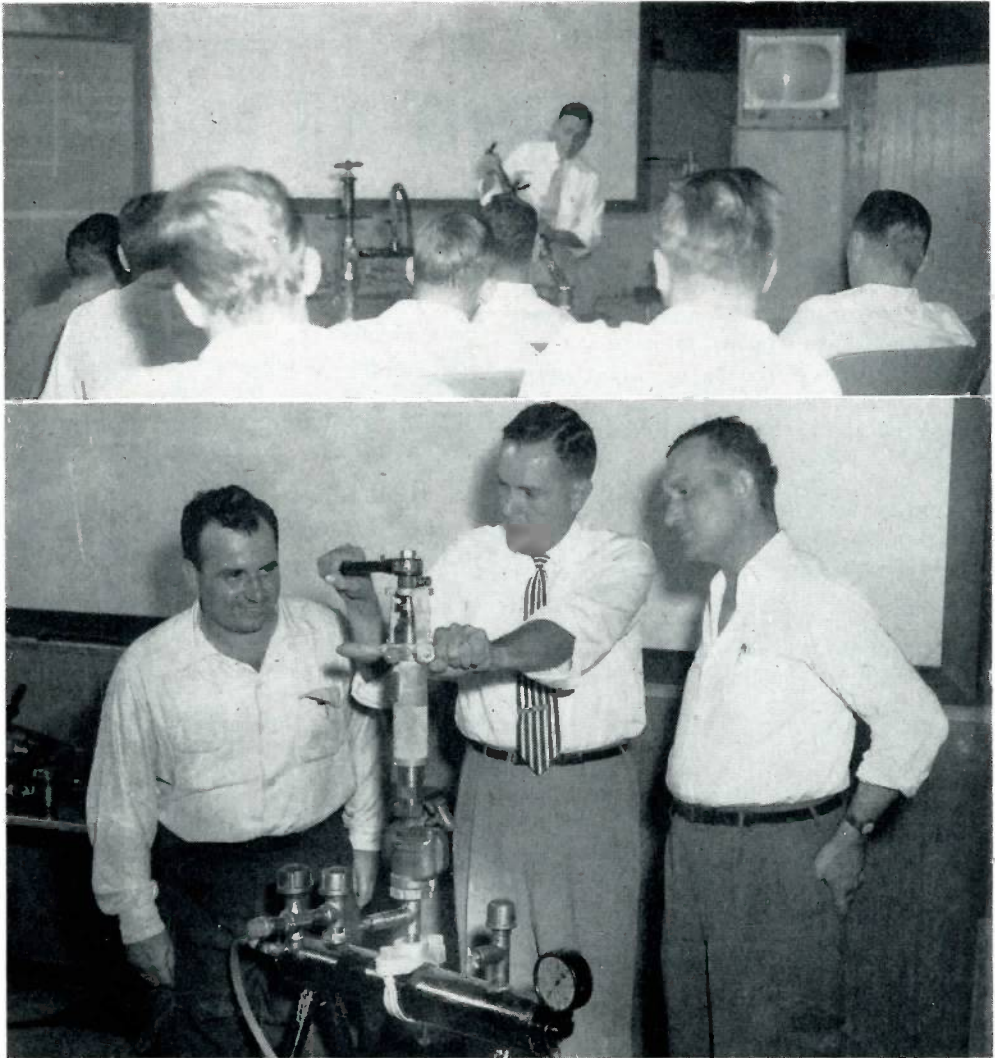
When an employee finishes his course, he will receive a certificate making him eligible for the Senior Serviceman rating. The company will accept the certificate without question as evidence that the employee is expert in servicing all types of domestic gas appliances.

Actually, 43 employees proved in their test that they qualified for Senior Servicemen. They were given the Senior Servicemen classification immediately. Nevertheless they are voluntarily attending certain classes in the training program because of a desire for even greater proficiency.

The program is the first of its kind in the United States, in the opinion of Mr. Dolan and Karl O. Werwath, president of the Milwaukee School of Engineering.

The plan, covering men who service domestic appliances, was worked out with the cooperation of Arthur St. John, president, and members of the Bargaining Committee of Local 18 of the United Gas, Coke and Chemical Workers of America (C.I.O.); Henry J. Dropp, director of operations for the company, and Messrs. Werwath and Dolan.

"In this program," Mr. Werwath said, "we find an ideal example of cooperation between labor and management in using specialized resources and talents of the community to keep abreast of technical advancements. Such a tripartite program



Cliff W. Auer, Mueller Co. sales representative, is shown delivering one of three lectures to Milwaukee Gas Light Co. servicemen on our No-Blo service connections and our No. 1 line stopper equipment. Mueller Co. was one of a number of companies represented at the Milwaukee School of Engineering. Below, Mr. Auer gives some after-class instruction to two company men who had additional questions on the use of Mueller equipment. Left to right, they are Bennie Coloso, Mr. Auer and Anthony Bucek.

is of mutual benefit to the public, the employees and the employer, but especially to the customers of the company."

Mr. St. John said that his union wants its men to be "tops in the service field."

The union's genuine interest in the customer prompted it to accept the plan, he added.

"Since the end of World War II gas equipment has undergone many

changes," Mr. St. John continued. "The union, believing that the best interests of the customer are paramount, desires to keep its servicemen abreast of the times. We believe this system of training will assure customers the very best of service from our members."

Mr. Dropp pointed out that one Senior Serviceman will be able to service any new appliance completely and efficiently

on a one call basis, thereby eliminating call-backs which resulted under the old system of serviceman training.

"The union agreed, under this new program, to permit one man to install and service all gas appliances," Mr. Dropp explained. "Formerly, two men were used for this work and in most cases only one man was necessary to complete the job. This action will result in lower service costs to the customer and will permit the dispatching of work in a much more efficient manner.

"With service trucks equipped with two-way mobile telephones, servicemen in the field will be able to answer the emergency calls within a few minutes after they come through the dispatch center."

Mr. Dropp recalled that, in the past, employees became servicemen by answering postings when vacancies occurred and by being chosen solely on the basis of seniority. He said they received their training on the job by working with a senior man.

"The rapid development in modern gas appliances with their more complicated controls and adjustments, now requires service by a workman equipped with a thorough knowledge of electrical and gas control techniques in order to make the appliance perform at the high efficiency needed for economical operation," he explained.

Among the subjects being taught at the Milwaukee School of Engineering are Fundamentals of Gas and Gas Appliance Servicing; D.C. and A.C. Electrical Circuit; Refrigeration and Heating Control Systems for Gas Applications.

Results of a placement examination given to the servicemen were used as a guide to the school in grouping men of equal experience and educational levels for the various classes.

The union and the company signed a special agreement covering the program. The preamble to the agreement says:

"The company and the union are in agreement that in order better to obtain a higher degree of technical knowledge and give customers an adequate gas appliance service, a new job classification of Senior Servicemen should be established."

The present classification of First Class Serviceman hereafter will include all present employees of that classification who do not become Senior Servicemen.

Paul B. Rutledge Heads A.G.A. Midwest Personnel Conference

PAUL B. RUTLEDGE, coordinator of employee activities, Michigan-Wisconsin Pipe Line Company, Detroit, has been elected chairman of the American Gas Association Midwest Personnel Conference.

Other officers of the Conference, elected for one-year terms are: Armond Harris, administrative assistant, Northern Natural Gas Company, Omaha, vice-chairman, and P. S. Hopkins personnel director, Metropolitan Utilities District, Omaha, secretary.

Mr. Rutledge has been a member of A.G.A. for the past four years and has been active in affairs of the Midwest Personnel Conference during that period. Last year he served as vice-chairman of this conference.

The A.G.A. Midwest Personnel Conference was organized in 1944 at the request of the Mid-West Gas Association, patterned after what is now the Employee Relations Section of the Southern Gas Association. Personnel executives from the midwestern region are welcome to meet with the conference group to exchange company experiences in industrial relations. They can be included in the mailing list of the A.G.A. Midwest Personnel Conference by writing the secretary, P. S. Hopkins, Metropolitan Utilities District, Utilities Building, Omaha 2, Nebraska.

Charles H. Mann . . .

(Continued from Page 11)

Taxation, and through participation in accounting and taxation activities of the Association over a number of years, has rendered exceptional service to the entire gas industry.

He has contributed greatly in studies and advice on all tax problems of the industry. His work with technical and policy committees resulted in effective presentation of utilities' tax problems.

Canadian Gas Group's 1954 Officers Represent Companies in U. S., Canada



The men who during the past year have been guiding the destinies of the Natural Gas Petroleum Association of Canada are shown above. From left to right, they are: John Ostler, Canadian Meter Co., Limited, Hamilton, treasurer; Thomas Weir, Union Gas Co., Chatham, first vice president; S. B. Severson, Dominion Natural Gas Co., Buffalo, New York, president; G. H. Smith, Port Colborne, Welland Natural Gas and Oil Co., immediate past president; L. B. Mehlenbacher, Cayuga, second vice president; S. C. Hanna, United Gas and Fuel Co., Hamilton, secretary and assistant treasurer.

The common bond of friendship which exists between the United States and Canada was further demonstrated during the past year when S. B. Severson of Buffalo, New York, was chosen as president of the Natural Gas and Petroleum Association of Canada. The twenty-eighth annual meeting of that organization was held in Windsor, Ontario.

Other officers chosen were: First vice president, Thomas Weir, Union Gas Company, Chatham; second vice presi-

dent, L. H. Mehlenbacher, Cayuga; treasurer, John Ostler, Canadian Meter Co., Limited, Hamilton; secretary and assistant treasurer, S. C. Hanna, United Gas and Fuel Co., Hamilton.

Directors elected are: L. B. O'Connor, Chatham; George Stammers, Brantford; John Reeves, Buffalo, New York; James Ferrel, Fort Erie; and W. A. Roliff, Toronto.

George W. Parker, president and treasurer, and John Milne, secretary, Mueller, Limited, attended the sessions.



More than 100 friends of Wendel E. Redmond pose outside the building in which Mr. Redmond was honored at a surprise get-together. J. K. Potts, Mueller Co. sales representative, was among those present. Mr. Potts took the photographs appearing with this article.



Wendel E. Redmond, left, former supervisor of construction for the City of Long Beach, California Gas Department, and Leonard L. Bendinger, general superintendent, display the automatic shotgun presented to Mr. Redmond at a surprise get-together honoring him on his service to the city. More than 100 persons attended the farewell party. A power saw given Mr. Redmond by a local supplier is shown on the platform.

Tribute Paid W. E. Redmond At Long Beach

WELDON E. REDMOND, superintendent of construction for the City of Long Beach Gas Department, Long Beach, California, ended twelve years service with that city this year. He resigned to enter a partnership with his brother in an earth-moving venture in Kansas.

A few days before he left, a surprise get-together was held in his honor. More than one hundred friends presented him with an automatic shotgun. Leonard L. Bendinger, general superintendent, spoke on Mr. Redmond's fine service to the city and then gave him the shotgun on behalf of those present. In addition, a local supplier gave him a power saw as a parting gift.

Included among those present was J. K. Potts, Mueller Co. sales representative, and an old friend of Mr. Redmond. The city of Long Beach uses a great deal of Mueller Co. products including such items as steel welding tees at the

mains with iron body stops at the meter, line stopper fittings in all sizes and other goods in our No-Blo line of products for the gas industry.

Mr. Redmond came to California in 1927 with his parents, and was graduated from Long Beach High School in 1935. One of his early experiences was working in the oil fields with Bamber & Co. In 1938, he worked as a welder for the Signal Pipeline Construction Company in Long Beach. He left the company to join the City of Long Beach as a welder. In 1949, he was promoted to operations and maintenance foreman.

He was advanced to construction foreman in 1950, and in 1952, he was ap-

pointed by the city manager as superintendent of construction.

M. J. Brejcha, more popularly known as "Mike," was appointed superintendent of construction replacing Mr. Redmond. Mr. Brejcha came to California from Muskogee, Oklahoma, in 1926 and was employed by the City of Long Beach Gas Department as a laborer in 1939. After serving with the Coast Guard during the war, he returned in 1945 as a meter setter. In 1947, Mr. Brejcha was made a foreman in the operations and maintenance section, a position he held until being appointed to the position made vacant by Mr. Redmond's resignation.

Frank L. Kuenstler Named Mueller Co. Sales Representative for West Texas

FRANK L. KUENSTLER has been appointed sales representative for Mueller Co. in our West Texas territory. His headquarters will be in Lubbock.

Mr. Kuenstler's appointment fills the vacancy created by the death last July 6 of Lon W. Woodson who had represented our firm in that territory.

A native Texan, Mr. Kuenstler was born in San Antonio and has spent most of his life in Texas. After graduation from high school, he enlisted in the United States Navy. Most of his foreign service was in the Far East.

After his discharge from the service, Mr. Kuenstler enrolled in college. He was graduated from South Texas State College at San Marcos.

During his college career, he became associated with the Wyche Construction Company of Dallas. This firm specialized primarily in large water and sewage treatment plants. Mr. Kuenstler arranged his college schedule in order that he could work part time with the firm. After graduation he became associated with Wyche Construction Company on a full-time basis, and later was made a junior partner.

Recently, because of ill health of Mr.



FRANK L. KUENSTLER

Wyche, the firm was dissolved and it is for this reason that Mueller Co. was able to secure Mr. Kuenstler's services.

He is 26 years old and is married. Mr. and Mrs. Kuenstler are the parents of two children, Sheryl Ann and Kimberly Dean.

FPC Tells Cost of Gas Transmission Facilities

Natural gas transmission facilities authorized by the Federal Power Commission during the first six months of 1954 had a total estimated cost of approximately \$324,500,000 and will add nearly one-half billion cubic feet of daily delivery capacity to the nation's individual transmission systems. The new systems will include about 4,500 miles of pipeline.

Major projects—those estimated to cost \$700,000 or more each—accounted for approximately \$324,277,000 of the total construction cost. These larger projects are expected to benefit 56 cities of 50,000 population or over in 14 states and the District of Columbia as well as numerous smaller communities.

The larger projects will increase the daily delivery capacity of the individual transmission systems involved by more than 1,373,000 cubic feet of natural gas per day. They involve construction of approximately 4,400 miles of new pipelines and installation of compressor facilities aggregating more than 138,000 horsepower.

During the six-month period, the largest single authorization was to Pacific Northwest Pipeline Corporation of Houston, Texas, to build a \$160,000,000 natural gas transmission system to supply markets in Idaho, Oregon, Washington, Wyoming, Colorado, and Utah. The Company's proposed project includes a main transmission line extending from a point in the San Juan Basin, New Mexico, near Ignacio, Colorado, to Bellingham, Washington. The system will consist of 1,466 miles of six to twenty-six inch main pipelines with 327 miles of four to twelve-inch sales laterals, 106 miles of ten to sixteen-inch supply laterals, a total of 81,120 horsepower in 14 main line compressor stations and miscellaneous gathering and processing facilities. Initial delivery capacity of the proposed system will be 377 million cubic feet of natural gas per day.

The Commission, during the fiscal year ended June 30 1954, authorized construction of a total of 6,405 miles of pipelines and installations of compressor

units aggregating 251,540 horsepower at a total estimated cost of \$500,881,248. For the twelve-month period major projects costing \$700,000 or more had a total estimated construction cost of \$467,722,687, and included 6,004 miles of pipeline and 233,980 horsepower in compressor units. They will add more than one and three-fourths billion cubic feet of daily delivery capacity to the nation's individual pipeline systems.

Since February 7, 1942 (the date the certificate provisions of the Natural Gas Act became effective), the FPC has authorized construction and operation of a total of more than 59,000 miles of pipeline and nearly 4,200,000 horsepower in compressor units. Total estimated cost of the facilities authorized over this twelve and one-half year period is \$4,378,000,000, and the projects are designed to add nearly twenty-two billion cubic feet of daily delivery capacity to the individual pipeline systems in the United States. The actual quantity of additional gas to be delivered directly from transmission systems to the nation's markets will be somewhat lower, however, because in certain instances the same gas will be transmitted through the new facilities of two or more pipeline systems.

Cities of 50,000 population or more which will benefit as a result of FPC authorizations during the first six months of 1954 include:

Colorado—Colorado Springs, Denver and Pueblo; Washington, D. C.; Iowa—Des Moines, Sioux City and Waterloo; Kentucky—Covington and Lexington; Maryland—Baltimore and Silver Springs; Minnesota—Minneapolis and St. Paul; Nebraska—Lincoln; New Jersey—Atlantic City, Bayonne, Camden, East Orange, Elizabeth, Hoboken, Irvington, Jersey City, Newark, Passiac, Paterson, Trenton, and Union City; New York—Buffalo, Binghamton, and New York City; Ohio—Cincinnati, Columbus, Dayton, Hamilton, Springfield and Toledo; Oregon—Portland; Pennsylvania—Erie, Pittsburg, Allentown, Bethlehem, Harrisburg, Reading, York, and Philadelphia; Virginia—Arlington, Norfolk, Portsmouth, and Richmond; Washington—Seattle, Spokane, and Takoma; West Virginia—Charleston, Huntington, and Wheeling.

Around the Industry . . .

(Continued on Page 2)

to the construction and operation of a gas appliance.

The books were prepared by Elbert C. Weaver, noted educational advisor, who will prepare the remaining four booklets in the series. The new booklets are entitled "Science Principles and Your Automatic Gas Range," and "Science Principles and Your Automatic Clothes Dryer." Intended for classroom and laboratory use in junior and senior high schools, the titles are self-explanatory. The booklets describe various features of these gas appliances and the scientific principle behind the design, construction and operation of each feature.

The booklets will be available at local gas companies or at the American Gas Association Headquarters in New York.

A.G.A. WINS SAFETY AWARD

THE NATIONAL SAFETY COUNCIL has presented to the American Gas Association a national award of merit for exceptional public service in the prevention of home accidents during the year 1953-1954. The program which led to this recognition was aimed at safe space heating in America's motels, tourist courts, and cabins.

The award was made at the annual conference of the National Safety Council in Chicago on October 20, by Ned H. Dearborn, president of the National Safety Council. The engraved certificate was received by James F. Oates, Jr., chairman of the board of The Peoples Gas Light and Coke Company and a director of the American Gas Association, on behalf of A.G.A.

The award was bestowed in recognition of the work done in a joint program by the American Gas Association and the American Automobile Association to eliminate accidents in transient facilities resulting from improper use and installations of unvented room heaters. The American Automobile Association was asked to refuse the use of its symbol of approval unless the room heater installations complied with the recommended codes developed by the American Gas Association. Training

schools were established for the field reporters of AAA so that they could recognize proper installations and guide the owners of tourist facilities in correcting existing systems.

After January 1954, non-standard systems were no longer acceptable to AAA and all renewals as well as new applications for the use of the AAA symbol had to show that their equipment met the established standards prescribed by the two national Associations. During this program more than 34,000 room heaters in 2,000 establishments were replaced by approved equipment. Furthermore, several states have enacted legislation requiring all owners of such facilities to follow essentially the same requirements.

Travelers seeing the AAA sign on motels, tourist courts, and cabins are assured that the gas heating equipment in them is fully safe.

Less than 3 per cent of our voting population has had any formal education in economics, according to the Chamber of Commerce of the United States.

U. S. Supreme Court for generations imported all its quill pens from England. Recently somebody discovered you could get all the court needed, in New Haven, Conn.



November • 1954

WALTER H. DYER, Editor

MUELLER CO.

MANUFACTURERS OF WATER AND GAS
DISTRIBUTION AND SERVICE PRODUCTS

FACTORIES
DECATUR, ILL. LOS ANGELES, CALIF.
SARNIA, ONT. CHATTANOOGA, TENN.

SALES OFFICES
NEW YORK CITY SAN FRANCISCO

TRADE MARK

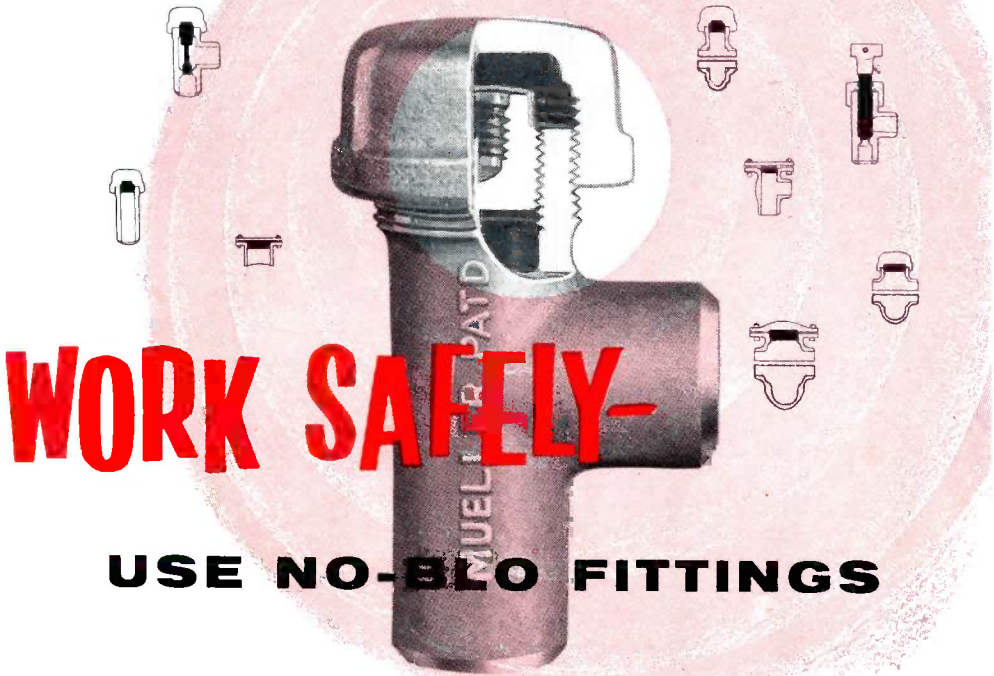
MUELLER

Reg. U. S. Pat. Off.

Member Industrial Editors Association of Chicago
and International Council of Industrial Editors



MUELLER®



WORK SAFELY-

USE NO-BLO FITTINGS

Patented

A complete line of No-Blo Fittings permit practically all distribution operations to be performed quickly and safely, under pressure, without loss of gas.

The "heart" of the No-Blo Method is an exclusive inner plug, stem or valve that may be installed or removed through a valve, under pressure. For example, the No-Blo Service Tee shown is welded to the main and the service line completed. Next, a control chamber or gate valve is attached to the top of the tee, a drilling machine is attached and the main drilled. This puts the service in operation. The valve is then closed, the drilling machine removed and the drill replaced by the plug



After remounting the drilling machine and opening the valve, the plug is screwed securely into the top of the tee. The drilling machine and valve may now be removed — without escape of gas. A completion cap "buttons up" the fitting and provides a positive double seal.

This same basic procedure is used with other No-Blo Fittings to make service connections, connect temporary lines, stop off mains and service lines for repair or replacement, extend lines, install stops and a myriad of other operations.

Ask your Mueller Representative about the full line of No-Blo Fittings and how they can solve your distribution and maintenance problems.

MUELLER CO.

Dependable Since 1857

MAIN OFFICE & FACTORY DECATUR, ILLINOIS