has made in the field of photographic instrumentation and high-speed photography.

F. N. Hubley (AM '44, M '52), the engineer responsible for the assembly and installation of 13 large waterwheel generators at the Niagara Power project, was awarded the Westinghouse Order of Merit on October 3. This is the highest honor bestowed on its employees by the Westinghouse Electric Corp.

The Franklin Institute awarded an Edward Longstreth Medal to C. B. Mirick (AM '08, F '47, Member for Life) of Washington, D. C., for his contribution to the design and development

OBITUARIES

Joseph Paul Andralouis (AM '55), an engineer with the corporate systems division of the United Aircraft Corp. in Hartford, Conn., died October 22 at the age of 54. Mr. Andralouis was a native of Lynn, Mass., and a member of the Society of Naval Architects and Marine Engineers. He was employed formerly with the Bureau Veritas, New York, N.Y., on electrical engineering inspection.

Herbert Barton Brooks (AM '09, M '19, F '31, Member for Life), chief of the electrical instrument section of the National Bureau of Standards, Washington, D.C., until his retirement in 1939, died recently at the age of 93. During his 33 years at the Bureau, Dr. Brooks devised the first deflection potentiometer for precise and rapid measurement of voltage in lamp testing. At the time of his death, Dr. Brooks had nearly completed an instrument for measuring electrical resistance with, he anticipated, a tenfold increase in accuracy over that of present instruments. A native of New Bremen, Ohio, he received an M.E. degree in electrical engineering from Ohio State University. In 1926, he was awarded a Ph.D. degree from Johns Hopkins University with his major study in electrical engineering. He began work in 1886 for the Edison Electric Illuminating Co. in Piqua, Ohio. In his second year there, the company sent him to the Edison Machine Works at Schenectady to study electrical engineering. Three months later, he returned to Piqua to become superintendent of the plant at the age of 18. He held this position for 11 years, during which time rapid expansion of the electrical industry and the upcoming use of alternating current led him to foresee the electrical engineer's impending need for training in physics and mathematics. In 1898, he resigned his position to attend Ohio State University. After graduation he joined the Bureau of Standards of which he became chief of the electrical instrument section in 1906. His thesis for a doctorate at Johns Hopkins was on an experimental study of the corona voltmeter. When World War II started, Dr. Brooks, though retired, returned to the Bureau. In 1955, he was elected vicepresident of the Edison Pioneers, an organization of men who had worked with Thomas Edison or played a part in developing his system of power plants. In 1959, he received the first Leeds Medal of aircraft radio control systems which permitted the first pilotless, controlled flights in this country.

F. J. Sindelar (AM '47), manager, quality assurance, manufacturing research corporate staff, International Business Machines Corp., was elected to the grade of Fellow in the American Society for Quality Control.

In recognition of his pioneering engineering achievements, Philip Sporn (AM '20, F '30, HM '61, Member for Life) was presented with the 1962 ASME Medal. As president of the American Electric Power Co. until his retirement in 1961, Mr. Sporn strove constantly for



H. B. Brooks

for outstanding contributions to electrical measurements.

Martin del Corral (M '24, Member for Life), president of the Bank of Bogotá for 15 years, died in Bogotá, Columbia, August 31 of cerebral thrombosis. Mr. Del Corral was born February 1, 1895, in Medellin, Colombia. He graduated from the School of Mines of Medellin, Colombia, in 1917. He took the electrical engineering course at Pratt Institute in Brooklyn, N.Y., and the graduate student apprenticeship course in 1917-18 at the Westinghouse Electric & Manufacturing Co. in East Pittsburgh, Pa. During 1918-24, Mr. Del Corral was chief engineer and general manager of the Vicente B. Villa & Co., Westinghouse agents for Colombia. He was in direct charge of design for a number of electric installations handled by Villa & Co. Among them were Municipal Tramways for the City of Medellin and complete hydroelectric plants for the cities of Manizales, Pasto, Ipiales, Ibague, Puerto Berrio, Tuluá, Sevilla, Roldanillo, Tunja, Socorro, and others in Colombia. Mr. Del Corral was recently awarded a doctor's degree honoris causa from Pratt Institute.

Joseph Carter Fincher (AM '57), electrical engineer with the General Electric Co. since 1956, died recently in Lynchburg, Va., from injuries received in an automobile accident. Mr. Fincher was born December 24, 1933, in Bristol, Va. He received a B.S. degree in electrical engineering in 1956 from the University of Tennessee. In 1954, he became an engineering aide at Watts Bar steam plant of the Tennessee Valley Authority. Two years later, Mr. Fincher joined General Electric in Syracuse, N.Y., as a semiimproved power generation techniques. His company's use of higher steam pressures and temperatures, large-sized units, and more efficient cycles marked new frontiers in power technology. Since his retirement, he has served as chairman of the American Electric Power System Development Committee.

G. B. Tebo (AM '36, F '61) of the Canadian Standards Association Testing Labs. has been named as Fellow of the Standards Engineers Society for his outstanding contributions to the establishment of standards, industrially, nationally in conjunction with the United States, and internationally.

conductor engineer in charge of test and evaluation of semiconductor devices. He was later assigned to the Semiconductor Product Dept. of General Electric as a product design engineer. He was a member of IRE, and the Association of Lynchburg General Electric Engineers.

Richard Edward Hodges (M '49), vicepresident, general manager, and a director of Appalachian Power Co. of Roanoke, Va., died on September 27. Mr. Hodges was born in Alderson, W.Va., on March 14, 1903. He received a B.S. degree in engineering in 1926 from West Virginia University. Mr. Hodges began with Appalachian that year and transferred to Kentucky Power Co. the next year. He became general manager of Kentucky Power and then returned to Appalachian in 1948, where, 6 years later, he became assistant general manager of Appalachian and, in 1960, vicepresident and general manager. He was a member of the West Virginia Society of Professional Engineers.

Lawrence Edward Marshall, Jr. (AM '37, M '45), engineering supervisor in charge of overhead distribution extensions for the Knoxville Utilities Board, Knoxville, Tenn., died on September 13. Mr. Marshall was born October 8, 1905, in Columbia, S.C., and graduated in 1929 from Clemson A&M College with a B.S. degree in electrical engineering. Mr. Marshall was associated, successively, with Westinghouse Electric Corp. in the graduate students course; the Brooklyn Edison Co. in Brooklyn, N.Y.; the U.S. Army as commanding officer on Civilian Conservation Corps projects; the Tennessee Valley Authority, Chattanooga, Tenn.; and R. H. Bouligny, Inc., Charlotte, N.C. He joined the Knoxville Electric Power and Water Board, predecessor of the Knoxville Utilities Board, in 1939, and was associated with that company continuously until his death. Mr. Marshall served as advisor to the Tennessee State Board of Architectural and Engineering Examiners. He was active on the Distribution Practices Committee of the Tennessee Valley Public Power Association. Mr. Marshall was a high school sponsor for the Junior Engineering Technical Society and one of the organizing committee and continued supporter of the Southern Appalachian Regional Science Fair. He was president of the Technical Society of Knoxville at the time of his death, and had served as chairman of

the East Tennessee Section of AIEE (1958-59).

Henry Van Arsdale Parsell (AM '89, Member for Life), the oldest living member of AIEE at the time of his death, died August 23 at the age of 94. He was a native of Newburgh-on-Hudson, N.Y. In 1880, he commenced the study of electricity making telephones, and motors, installing gas lighting and bell systems at home, and repeating experiments of Tyndall and others in frictional electricity. He entered the Stout, Meadowcroft Co. in 1885 and gained knowledge of incandescent lighting by primary batteries and dynamos. Mr. Parsell was employed, subsequently, by E. S. Greeley & Co., Gibson Electric Co., and in the Engineering Dept. of the Edison United Manufacturing Co. In 1889, he installed the first successful medical apparatus for obtaining galvanic and faradic currents from the Edison System. Mr. Parsell studied at Stevens Institute of Technology in 1889-91, and while there designed the miniature electric railway and the effects in the Chamber of Mystery at the Lenox Lyceum Electrical Exposi-



H. V. A. Parsell

tion. He later designed and installed a plant at Taylor's-on-Schroon, Warren County, N.Y., the first electric plant in this country to use the "Otto" gasoline engine and, in 1892, he became associated with A. C. Manning & Co. to install electric plants using these engines. Later that year, he was employed in the experimental shop of the Edison Decorative & Miniature Lamp Dept., Harrison, N.J. At his retirement in 1920, Mr. Parsell was an electrical engineer with Edison Research. He was a past president of the New York Electrical Society and a member of the Edison Pioneers.

Thomas Franklin Peterson (AM '25, M '32, Member for Life), president of Preformed Line Products Co., Cleveland, Ohio, died August 24 at the age of 59. A native of Brooklyn, N.Y., where he was born December 12, 1902, Mr. Peterson graduated from Cooper Union in 1923 with a B.S. degree in electrical engineering and from Stanford University the following year with a master's degree in electrical engineering. He came to Cleveland from Worcester, Mass., in 1944 as sales manager of the American Steel & Wire Division of the U.S. Steel Corp. In 1948, he founded the Preformed Line Products Co. in Cleveland and, at the time of his death, was the holder of more than 60 patents for helically formed wire accessories used in the electrical power and communications industries. Mr. Peterson was awarded the Gano Dunn Medal for professional achievement by the Cooper Union Alumni Association of New York in 1957, and was cited for "excellence as an inventor, research engineer, author, consultant, and teacher." He is a member of the Cleveland Engineering Society, Tau Beta Pi, and Sigma Pi. Mr. Peterson has served on the AIEE Power Transmission and Distribution Committee (1928-32) and Management Committee (1958-59).

Walter A. Schmidt (M '22, Member for Life), consultant, Western Precipitation Division, Joy Manufacturing Co., Los Angeles, Calif., died September 14. Mr. Schmidt was internationally known for his accomplishments in the field of air pollution control. A member of the Board of Directors of the Joy Manufacturing Co., he was the founder and president for 48 years of the Western Precipitation Corp. Mr. Schmidt was born August 26, 1883, in Los Angeles, Calif. He received a B.S. degree in 1906 from the University of California. His memberships included the American Chemical Society of which he was a former director, the National Association of Manufacturers, AIChE, Electrochemical Society, American Association for the Advancement of Science, Sigma Xi, and Phi Lambda Upsilon.

Carl Albert Schneider (AM '04, M '13, Member for Life), retired electrical engineer, died October 10 in Montclair, N.J. Mr. Schneider was born April 25, 1882, in Salt Lake City. He worked in Mexico as an assistant engineer on a hydroelectric project and, in 1904, he was graduated from Columbia University as an electrical engineer. Mr. Schneider next joined General Electric Co. in Schenectady, N.Y., and subsequently taught electrical engineering at Columbia. During 1905-06, he was assistant engineer with the New York City Dept. of Water Supply, Gas and Electricity. The following year, he was employed by the Butte-Helena (Mont.) Power Co. as an assistant engineer. Later, he did engineering design, construction, and operational work in New England in connection with hydroelectric and other stations for transit and electric distribution concerns and worked, also, for the New York, New Haven and Hartford Railroad. From 1913 until his retirement in 1948, Mr. Schneider was employed by Ford, Bacon & Davis, Inc., in New York, where he was in charge of the design, construction, operation, and maintenance of hydroelectric, steam-electric, and substation developments for public utilities and industrial corporations. He was a former director of the company's construction subsidiary, the Ford, Bacon & Davis Construction Co. Mr. Schneider belonged to ASME.

Charles Foster Terrell (AM '10, M '18, F '46, Member for Life), retired, died October 6 at Menard, Tex., at the age of 77. He was born in Jerseyville, Ill., but



C. F. Terrell

started his electrical career in Seattle in 1903 with the Seattle Electric Co., the predecessor of the Puget Sound Power & Light Co., as a substation operator and rose to general division superintendent in 1925. Mr. Terrell was graduated from the University of Washington in 1910 with a B.S. degree in electrical engineering. In 1925, he became general superintendent of the El Paso Electric Co. The next year, he was named general superintendent of the Tampa Electric Co. During 1928-40, he was associated with the Gulf States Utilities Co. at Beaumont, Tex., as vice-president and operating manager. In 1940, he returned to the Puget Sound Power & Light Co. as operating manager, and retired in 1950 as vice-president of operations. Mr. Terrell joined the Nebraska Public Power System as executive director and left in 1952 to join Ebasco Services as project manager of a United States Government project in Greece. He was decorated by the King of Greece in recognition of his work. Mr. Terrell served as vice-president of AIEE District 9 (1946-48) and as chairman of the Seattle Section (1922-23).

Henry Grady Wright, Jr. (AM '51, M '61), engineering supervisor in the North Carolina Lab. of Bell Telephone Labs., Winston-Salem, N.C., died of a heart attack on September 25. A native of Shelton, S.C., Mr. Wright received a B.S. degree in electrical engineering in 1950 from Clemson College. Following graduation, he was associated with the Duke Power Co. as assistant laboratory supervisor, responsible for meter testing and calibration. In 1951, Mr. Wright joined Western Electric Co. as manufacturing engineer and was engaged in transformer manufacturing and testing until 1955. During this time, he was assigned to the Bell Telephone Labs. in engineering design and development work on magnetic devices and components for power applications. In 1955, he transferred permanently to the Bell Telephone Labs. as a member of the Power Apparatus Design group. He became supervisor of this group in 1959 and was currently engaged in the development of magnetic amplifiers, transistor inverters, and regulated power supplies for communications systems. Mr. Wright had served as chairman of the Electronics Industries Association P-35 Subcommittee on Encapsulated Transformers. This year, he was chairman of the Winston-Salem Council of Engineering Societies.