

Contributors to this Issue

LEONARD GLADSTONE ABRAHAM, B.S., 1922, M.S., 1923, University of Illinois. American Telephone and Telegraph Company, Department of Development and Research, 1923-34; Bell Telephone Laboratories, 1934-. Mr. Abraham has been engaged in transmission development work on toll telephone systems.

AUSTIN BAILEY, A.B., University of Kansas, 1915; Ph.D., Cornell University, 1920; Instructor in Physics, Cornell University, 1915-18; Signal Corps, U. S. A., 1918-19; Assistant Professor of Physics, University of Kansas, 1921-22. American Telephone and Telegraph Company, Department of Development and Research, 1922-34; Bell Telephone Laboratories, 1934-. Dr. Bailey's work has been largely along the line of methods for making radio transmission measurements and of long-wave radio problems.

F. A. GIFFORD, B.S., Tufts College, 1920. General Electric Company, Lynn, Massachusetts, 1920-22; American Radio and Research Corporation, Medford, Massachusetts, 1922; New England Telephone and Telegraph Company, Engineering Department, Boston, 1922-. Mr. Gifford has been engaged on various types of telephone engineering work, devoting a large part of his time during the past four years to problems in connection with the Boston Marine Radio Telephone Service.

EARL B. HANSEN, B.S. in Electrical Engineering, University of California, 1920. Pacific Telephone and Telegraph Company, 1920 to present date. Latterly, Mr. Hansen's duties have been in the field of toll transmission.

H. E. HARING, B.S., Franklin and Marshall College, 1916; M.A., Princeton University, 1917. Assistant Chemist, Ordnance Department, U. S. Army, 1917-19; Associate Chemist, U. S. Bureau of Standards, 1919-28; Electrochemist, Victor Talking Machine Company, 1928-29; Bell Telephone Laboratories, 1929-. Since 1919 Mr. Haring has been engaged in electrochemical research in connection with storage batteries and other electrochemical apparatus, electro-deposition, and corrosion.

H. R. HUNTLEY, B.S., University of Wisconsin, 1921. Wisconsin Telephone Company, Engineering Department, 1917-30; American

Telephone and Telegraph Company, Department of Operation and Engineering, 1930-. Mr. Huntley's work has been concerned principally with transmission and inductive coordination matters.

DR. JEWETT, as Vice President of the American Telephone and Telegraph Company and President of the Bell Telephone Laboratories, needs no introduction to *Technical Journal* readers.

S. A. LEVIN, E.E., Chalmers Technical Institute, Gothenburg, 1919; Technische Hochschule, Berlin, 1920-21; Technische Hochschule, Dresden, 1921-23. Radio Department, General Electric Company, Schenectady, N. Y., 1923-26; Engineering Department, National Electric Light Association, New York, N. Y., 1926-30; Bell Telephone Laboratories, 1930-. Mr. Levin's work has to do with the development of high-frequency measuring equipment for carrier systems.

FREDERICK B. LLEWELLYN, M.E., Stevens Institute of Technology, 1922; Ph.D., Columbia University, 1928. Western Electric Company, 1923-25; Bell Telephone Laboratories, 1925-. Dr. Llewellyn has been engaged in the investigation of special problems connected with radio and vacuum tubes.

W. P. MASON, B.S. in Electrical Engineering, University of Kansas, 1921; M.A., Columbia University, 1924; Ph.D., 1928. Bell Telephone Laboratories, 1921-. Dr. Mason has been engaged in investigations on carrier transmission systems and more recently in work on wave transmission networks, both electrical and mechanical.

R. B. MEADER, B.S., University of New Hampshire, 1921. New England Telephone and Telegraph Company, 1922-. Since 1930 Mr. Meader has worked chiefly on radio telephone field strength surveys and other activities leading to the establishment of the Green Harbor Radio Telephone Station and the development and operation of the Boston Marine Radio Telephone Service.

E. J. O'CONNELL, B.S., Northwestern University, 1924. American Telephone and Telegraph Company, Long Lines Department, 1924-25; Illinois Bell Telephone Company, Engineering Department, 1925-28; American Telephone and Telegraph Company, Department of Operation and Engineering, 1928-. Mr. O'Connell's work has been concerned principally with inductive coordination matters.

LISS C. PETERSON, E.E., Chalmers Technical Institute, Gothenburg, 1920; Technische Hochschule, Charlottenburg, 1920-21; Technische Hochschule, Dresden, 1921-22; Signal Corps, Swedish Army, 1922-23.

American Telephone and Telegraph Company, 1925-30; Bell Telephone Laboratories, 1930-. Mr. Peterson is engaged in the study of modulation and other problems connected with high-frequency carrier systems.

G. S. PHIPPS, B.S. in Electrochemical Engineering, Pennsylvania State College, 1930. Bell Telephone Laboratories, 1930-. Mr. Phipps has been engaged principally in the metallurgical investigation of lead, aluminum and zinc alloys.

E. E. SCHUMACHER, B.S., University of Michigan; Research Assistant in Chemistry, 1916-18. Engineering Department, Western Electric Company, 1918-25; Bell Telephone Laboratories, 1925-. As Assistant Research Metallurgist, Mr. Schumacher is in charge of a group whose work relates largely to research studies on metals and alloys.

U. B. THOMAS, JR., B.S. in Chemistry, William and Mary, 1929. Bell Telephone Laboratories, 1929-. Mr. Thomas has been engaged principally in the study of base metal contacts, storage batteries, and allied electrochemical problems.

HOWARD M. THOMSON, B.S. in E.E., University of Washington, 1930. Bell Telephone Laboratories, 1930-32; American Telephone and Telegraph Company, Department of Development and Research, 1932-34; Bell Telephone Laboratories, 1934-. Mr. Thomson's work has been principally on studies of long-wave radio transmission and field tests on an experimental transmitting wave antenna.

H. N. WILLETS, Western Electric Company, Engineering Inspection Department, 1917-25; Philadelphia Instrument Shop, 1921-25; Supply Department, 1925-26. Graybar Electric Company, 1926-28; Western Electric Company, 1928-. Mr. Willets is engaged in the promotion of aircraft radio, broadcasting, and ship-to-shore radiophone and harbor craft radiophone.