Contributors to this Issue

JOHN R. CARSON, B.S., Princeton, 1907; E.E., 1909; M.S., 1912; American Telephone and Telegraph Company, 1914–. Mr. Carson is well known through his theoretical transmission studies and has published extensively on electric circuit theory and electric wave propagation.

A. B. CLARK, B.E.E., University of Michigan, 1911; American Telephone and Telegraph Company, 1911–. Toll Transmission Development Engineer, 1928–. Mr. Clark's work has been largely concerned with toll telephone and telegraph systems.

KARL K. DARROW, B.S., University of Chicago, 1911; University of Paris, 1911–12; University of Berlin, 1912; Ph.D., University of Chicago, 1917; Western Electric Company, 1917–25; Bell Telephone Laboratories, 1925–. Dr. Darrow has been engaged largely in writing on various fields of physics and the allied sciences. Some of his earlier articles on Contemporary Physics form the nucleus of a recently published book entitled "Introduction to Contemporary Physics" (D. Van Nostrand Company). A recent article has been translated and published in Germany under the title "Einleitung in die Wellenmechanik."

BANCROFT GHERARDI, B.Sc., Polytechnic Institute, Brooklyn, N. Y., 1891; M.E., Cornell University, 1893; M.M.E., Cornell University, 1894. New York Telephone Company, Engineering Assistant, 1895–99; Traffic Engineer, 1899–1900. New York and New Jersey Telephone Company, Chief Engineer, 1900–06. New York Telephone Company, and New York and New Jersey Telephone Company, Assistant Chief Engineer, 1906–07. American Telephone and Telegraph Company, Equipment Engineer, 1907–09; Engineer of Plant, 1909–18; Acting Chief Engineer, 1918–19; Chief Engineer, 1919–20; Vice President and Chief Engineer, 1920–. Mr. Gherardi is a Past President of the American Institute of Electrical Engineers.

FRANK B. JEWETT, A.B., California Institute of Technology, 1898; Ph.D., University of Chicago, 1902. American Telephone and Telegraph Company, Transmission and Protection Engineer, 1904–12. Western Electric Company, Assistant Chief Engineer, 1912–16; Chief Engineer, 1916–21; Vice President and Chief Engineer, 1921–22; Vice President, 1922–25. International Western Electric Company,

Vice President, 1922–25. Manufacturers Junction Railway, Vice President, 1922–25. American Telephone and Telegraph Company, Vice President, and Bell Telephone Laboratories, President, 1925–. Dr. Jewett is a Past President of the American Institute of Electrical Engineers.

FRANCIS F. LUCAS, Associated Bell Telephone Companies, 1902–10; Western Electric Company, 1910–25; Bell Telephone Laboratories, 1925–. Mr. Lucas has specialized in the development and application of microscopy. He has received international recognition and awards for the development of high power metallography and ultra-violet microscopy and for numerous scientific papers which he has contributed on the subjects of metallurgical and biological research. For several years he has been Consulting Technical Expert for the War Department, U. S. A., Watertown Arsenal.

EDWARD L. NELSON, B.S. in E.E., Armour Institute of Technology, 1914; Western Electric Company, 1917–25; Bell Telephone Laboratories, 1925–. As Radio Development Engineer of Bell Telephone Laboratories, Mr. Nelson is responsible for the development and design of commercial radio apparatus, which includes radio broadcasting equipment.

R. L. WEGEL, A.B., Ripon College, 1910; Assistant in Physics, University of Wisconsin, M.A., 1910–12; Western Electric Company, 1914–25; Bell Telephone Laboratories, 1925–. Mr. Wegel has written several papers on theory of telephone receivers and on the theory of hearing. The article appearing in this issue is taken from lecture notes on Mechanics of Vibrating Systems by the author. It is planned to publish these notes in future issues of the Bell System Technical Journal.

M. K. ZINN, B.S. in E.E., Purdue University, 1918; American Telephone and Telegraph Company, 1919–. Mr. Zinn's work has been related particularly to the design of loading for telephone circuits.

CORRECTION SLIP FOR ISSUE OF JANUARY, 1930

Page 153: Equation (10) should read

$$h(t) \sim \left\{ 1 + \frac{1}{1!}\left(\frac{1}{4\lambda t}\right) + \frac{1^2 \cdot 3^2}{2!}\left(\frac{1}{4\lambda t}\right)^2 + \cdots \right\} \frac{1}{\sqrt{\pi \lambda t}},$$

$$h(t) \sim S(\lambda t) \qquad (10)$$