

## CONTRIBUTORS TO THIS ISSUE

**Brock, G. F. O.:** Born 1880, at San Francisco, Calif. Graduated Ribe Kathedralskole, 1898; Military Academy, Copenhagen, 1903; Lieutenant Royal Danish Army, Royal Academy of Fine Arts, Dresden, 1906; Academy Vermehren Copenhagen and A. F. Gorguet, Paris, 1910; sole representative of Danish art at the Worlds' Expositions at Buenos Aires, 1910, San Francisco, 1915, and Rio de Janeiro, 1922. Head of the Brock Organization for hand-coloring of motion picture film from 1923 to date.

**Cunningham, T. D.:** Born October 16, 1902, at Alton, Ill. B.S. in E.E., University of Missouri, 1926; drafting department, Western Electric Company, summer of 1923; meter department, Kansas City Power & Light Company, summer of 1924; radio engineering department and broadcast station operator KDKA, Westinghouse Electric & Manufacturing Company, summer of 1925; broadcast station operator FKRU, Stephens College, Columbia, Miss., 1925-26; radio engineering department, Westinghouse Electric & Manufacturing Company, 1926-30; engineering department, RCA Victor Co., Inc., 1930 to date.

**Downes, A. C.:** See January, 1931, issue of JOURNAL.

**Dreher, Carl:** See January, 1931, issue of JOURNAL.

**Edgerton, H. E.:** Born April 6, 1903, at Fremont, Neb. B.S., University of Nebraska, 1925; M.S., Massachusetts Institute of Technology, 1927; General Electric Company, 1925-26; instructor, Massachusetts Institute of Technology, 1927 to date.

**Farnham, R. E.:** Born September 11, 1894, at Metuchen, N. J. B.S., Case School of Applied Science, 1913; E.E., Case School of Applied Science, 1930. Commercial engineer, General Electric Company, 1919 to date.

**Fowler, E. W.:** Civil engineering, Worcester Polytechnic Institute. Engineer dealing with special hazards, Committee on Fire Prevention and Engineering Standards of the National Board of Fire Underwriters, 1928 to date.

**Joy, D. B.:** See January, 1931, issue of JOURNAL.

**Kreuzer, B.:** Born 1909. E.E., Polytechnic Institute of Brooklyn, 1928; electro-acoustic research, Radio Corporation of America, 1928-30; development engineer, RCA Photophone, Inc., 1930 to date.

**Newell, L. B.:** Plant engineering and purchasing departments, Thomas A. Edison Company, 1915-17; E. I. Du Pont de Nemours Company, 1917-22; engineering bureau of New York Board of Fire Underwriters, 1922-27; specialist in pyroxylin and film hazard problems, New York Fire Insurance Exchange, 1927 to date. Author, *Laboratory Survey*.

**Norling, J. A.:** Born August 6, 1895, at Tunis, Africa. Photographic division, U. S. Army Corps, 1917-19; producing technical animated motion pictures for soldier training, Columbia University and U. S. Army War College, 1919-23; Bray Productions, Inc., 1923-25; secretary and treasurer, Loucks & Norling Studios, Inc., 1925 to date.

**Olson, H. F.:** B.E., University of Iowa, 1924; M.S., University of Iowa, 1925; Ph.D., University of Iowa, 1928. Research assistant, physics department, University of Iowa, 1925-28; research department, Radio Corp. of America, 1928-30; engineering department, RCA Photophone, Inc., 1930 to date.

**Plank, W. C.:** Born 1881, at Baucari, Mexico. Superintendent and manager, San Juan Mining Company, 1900 to date. Experimenter with continuous projectors.

**Rippenbein, A. P.:** Born 1895, in Russia. American Recono, Inc., 1927 to date.