Fred Schmid

After 53 years of service with the C. P. Goerz American Optical Co., New York, President and General Manager Fred Schmid has resigned from active work and is now living in retirement at his home in Larchmont, N.Y.

It was on September 13, 1898, when Fred Schmid's destiny was tied up with the Goerz interests. On that day, Fred Schmid, a young instrument-maker, applied for a position with the Goerz Optical Works in Berlin-Friedenau, Germany. After a few hours' interview with C. P. Goerz, the founder of the Goerz enterprises, the latter offered to send him to America to open a branch factory there, in order to meet the ever increasing demand for Goerz photographic lenses in the U.S.A. In a spirit of adventure young Schmid accepted the offer readily and, after six months of intensive study of the manufacturing methods of the parent house, he arrived in New York in May 1899 to set up shop. Since then the making of Goerz American photo-lenses was carried on here under his personal supervision.

The *American* firm was incorporated in 1906 as the C. P. Goerz American Optical Company and its assets and manufacturing rights were acquired through purchase by a small group of American citizens in 1920. The *German* Goerz Company was merged in 1926 with the well-known Zeiss Ikon Corp. in Germany. Today the *American* Goerz firm is the only company which supplies a full line of the Goerz Photo-lenses.

Fred Schmid, at first in charge of production, was made General Manager in 1910, Vice-President of the American company in 1920 and finally President in 1937. He made the last of his frequent business trips back to Germany during the summer of 1949. The company has announced that Mr. Schmid will continue to serve on its Board of Directors and in a consulting capacity.

Fred Schmid was born at Lehe, near Bremerhaven, on August 5, 1870, and next month will celebrate his 81st birthday with his three daughters at their summer cottage in South Salem, N.Y. He has been a member of this Society since 1929.

BOOK REVIEWS

Encyclopedia on Cathode-Ray Oscilloscopes and Their Uses

By John F. Rider and Seymour D. Uslan. Published (1950) by John F. Rider Publisher, Inc., 480 Canal St., New York 13. 992 pp. + 8 pp. index + 3000 diagrams and illustrations. $8\frac{1}{2} \times 11$ in. Price $9.00.

This valuable new book is a rather complete collection of practical information relating to modern oscillographs and their uses. There is the absolute minimum of mathematics included, and the authors have not resorted to too intense theoretical treatment. Only the essentials have been covered. Since the book is on a practical level it will undoubtedly find widespread acceptance.

The reader will find a description of practically every type of commercial oscillographic equipment included, together with information which the engineer can put to practical use every day.

As a matter of fact, there are 331 pp. devoted exclusively to instruments and accessory equipment. This rather complete coverage, in itself, will make the book extremely useful.

Cathode-ray tubes are fully covered in some 171 pp. Over 200 pp. are devoted to specific applications of oscillographs, and 107 pp. to circuit diagrams and various operating specifications. There is a complete bibliography at the conclusion of each chapter which will prove very valuable to the engineer for reference purposes.

The 1580 illustrations showing photographic reproductions of various waveforms will unquestionably prove very valuable to the average engineer, and the reviewer finds the collection one of the most comprehensive to be found anywhere in the literature.

It is regrettable that the word oscillograph has not been used instead of the term oscilloscope. The former is the more erudite term of the two and is undoubtedly to be preferred in scientific literature. Surely, the term oscillograph was the first word applied to the particular instrument, and an investigation of early writers on the subject will disclose its preference over all other terms. It was used, for instance, by J. B. Johnson in 1922 in the *Journal of the Optical Society of America* to describe "A Low Voltage Cathode-Ray Oscillograph," the first known practical instrument of this kind. A great many early references to the oscillograph are given in *The Cathode-Ray Oscillograph in Radio Research*, published by His Majesty's Stationery Office in London in 1933, and there is no reference to the word oscilloscope. This latter term has been widely used in the radio service field, but has not found great favor among engineers who are daily engaged in the study or design and development of cathode-ray oscillographs. This misuse of a word does not detract from the excellence of the material covered.

In summarizing, the reviewer has found this book to be an exceptionally fine reference work on the subject of cathode-ray oscillographs and their uses, and does not hesitate to recommend it as a valuable addition to engineering libraries everywhere.—*Scott Helt*, Research Div., Allen B. Du Mont Laboratories, Inc., 2 Main Ave., Passaic, N.J.

Progress in Photography—1940–1950

Editor-in-Chief, D. A. Spencer. Editorial Board, W. F. Berg, J. Eggert, L. E. Varden and T. A. Vassy. Published (1951) by The Focal Press, Ltd. Distributed by L. E. Varden, Pavelle Color, Inc., 533 W. 57 St., New York 19. 450 pp. + 10 pp. appendix. 150 illus. 7 × 9½ in. Price $10.00.

In 81 reports, 68 authors have recorded the progress of a decade in this volume. Some of their names are quite familiar to *Journal* readers. The opening article is by Glenn Matthews; E. W. Kellogg reports on sound recording; John Crabtree on processing; John Bradley on film storage.

The broad base of photography is covered by this book, with little detail given on any single phase; however, liberal reference lists are appended to each chapter.

Equipment progress is reported in terms of amateur equipment. There are some references to professional equipment. The new high-acetyl cellulose acetate film base gets one short chapter. Articles or chapters which include primarily motion picture subjects are: High-Speed Photography; Sound Recording for Motion Pictures; Recording with Galvanometer Oscillographs; Cine Radiography; Visual Aids for Instruction; Time and Motion Study; Job Training; Propaganda, Selling Aids and Demonstration Films; and a description of the functions and activities of the SMPTE.

It should not be assumed, however, that these reports have interest for only the motion picture engineer. Considering the broad base of our membership we counted 53 articles out of the 68 which have direct information bearing on some phases of our work.

Perhaps it is too much to ask, with so many subjects crowded into less than 500 pages, that a less selective annotation of equipment be employed! As we read some subjects we find, or sense, a partiality toward certain manufacturers. Important developments of competitors were not always reported. The editor might have condensed the three references or descriptions of the Polaroid Land camera to a single entry and added a few other interesting developments in the inches he gained.

The comment above, incidentally, applies to non-U.S. contributors as well as to

our compatriots. (About a third of the authors are American.)

Progress in Photography—1940–1950 should be a handy reference book with its international basis, especially when supplemented by the more detailed progress reports which appear in our *Journal*. It provides quick information on progress in England and Europe as well as our own, and the generous references will be of definite aid to the researcher. Its shortcomings are outweighed by the more positive aspects of the book, and readers may well find it a useful tool. The illustrative material is scanty but perhaps adequate.—*Don Bennett*, Associate Editor, Photo Dealer Magazine, 251 Fourth Ave., New York 10.

The Illumination of Photographic Darkrooms and the Determination of the Spectral Sensitivity of Photographic Material

By G. Weber. Translated from Danish into English by Vibeke Bonde. Published (1950) by the Academy of Technical Sciences and the Institution of Danish Civil Engineers on commission by G. E. C. Gad, 32 Vimmelskaftet, Kobenhavn K., Denmark. 280 pp. including appendix, bibliography and 12 pp. index. 166 illus. 6¾ × 9¾ in. Paper cover. Price Danish Kr. 16,50 (about $2.00).

G. Weber, Professor of Illuminating Engineering at the Technical University of Denmark and President of the Danish Illuminating Engineering Society, has investigated the theory applicable to a judgment of what is the maximum light tolerable to photographic materials and the minimum light needed for adequate working conditions.

The author brings out the fact that darkroom illuminating should be chosen with regard to both the spectral sensitivity of the photographic materials to be handled and the sensitivity of the eye and that both of these sensitivities should be determined at the low intensities commonly used. In most cases this will require a source and filter combination.

The author states "...that the filters should have maximum efficiency, i.e., their absorption must be such as to cause minimum reduction of the light in relation to the eye and maximum reduction in relation to the plate." Theoretical consideration and calculations are discussed at considerable length and illustrative examples presented in unusually great detail. Some, but much less, attention is paid to practical trial methods. Under the heading "Direct Determination of the Permissible Illumination," there is recognition of the fact that in general the individual theoretical factors will not be precisely known. The statement, "None of these seven factors are known with any great certainty," is given as one reason for use of an experimental method. Again it is stated of the theoretical method presented, "But even if all these quantities were known, the method is of course far too complicated for practical purposes, although it may be of a certain theoretical interest."

This reviewer concurs in Dr. Weber's judgment; judged by this criterion, there are many, many pages "of a certain theoretical interest" and relatively few pages devoted to procedures intended for "practical purposes."—*D. R. White*, Research Laboratory Director, Photo Products Dept., E. I. du Pont de Nemours & Co., Inc., Parlin, N.J.

Audio Anthology

Compiled from *Audio Engineering*, C. G. McProud, Editor. Published (1950) by Radio Magazines, 342 Madison Ave., New York 17. 124 pp. incl. 210 illus. 8¾ × 9¾ in. Price $2.00.

This compilation of 38 articles from *Audio Engineering* covers the period from May 1947 to December 1949. The selection of material has been largely directed toward the audio hobbyist. Eleven of the articles are on audio amplifiers. The remainder are on the subjects of loudspeakers, dividing networks, equalizers, noise suppressors, volume expanders and radio receivers.

Since the compilation is directed toward the audio hobbyist, the accent is on practical construction rather than on theoretical design considerations. However, when design information is necessary for the purpose of the article, it is presented in an understandable and usable form, as for

example in the articles on loudspeaker enclosures, dividing networks and multiple-speaker matching. The amplifiers described cover the range from phonograph preamplifiers to 30-watt power amplifiers. A considerable amount of space (10 articles) is devoted to the subject of frequency equalization, giving it a thorough coverage from a practical standpoint.—*G. W. Read*, Westrex Corp., 6601 Romaine St., Hollywood 38, Calif.

Bibliography on Stereography

Four hundred references have been published in mimeo form by the Stereo Society of America, covering magazines and journals from this country and from abroad. The references have a wide range—from editorials and popular articles to learned treatises. Copies of the Bibliography are available at $1.50 each from The Stereo Society of America, Inc., Owen K. Taylor, Secretary, 40 Monroe St., New York 2.

New Products

Further information about these items can be obtained from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of news items does not constitute an endorsement.

Trade-marked the "Color-Tru Optical Bench," this equipment has been designed to enable the operator to judge intelligently the quality of photographic objectives and lens systems for most aberrations. Results are read directly by dial indicator in thousandths of an inch for comparisons between lenses. Attachments are available for holding cameras in alignment, nodal slide, lens boards and lens barrels. Targets are those of the U.S. Bureau of Standards. Checks can be made of resolution, color, focus, diaphragm location, effective aperture, cell separation, spherical aberration, element alignment and distortion. Prices range from $237.50 to $650.00, depending on accessories and on choice of microscope. The Color-Tru Optical Bench is available from Grover Photo Products, 2753 El Roble Dr., Los Angeles 41.