

## HIGHLIGHTS OF THE SPRING CONVENTION

EDGEWATER BEACH HOTEL, CHICAGO, ILL.,  
APRIL 27-30, 1936

Many industrial motion picture firms and apparatus manufacturers are located in and around Chicago, Ill. It is quite appropriate, therefore, that the Society should hold a convention in Chicago every few years although the acknowledged production centers are Hollywood and New York. Nevertheless, it is gratifying to note that the attendance has increased at each succeeding convention at Chicago. At the Spring, 1936, Convention the total registration was approximately 150 and all sessions were well attended, with the maximum occurring on Wednesday morning when over 250 were present.

The program of papers and presentations, as actually followed at the sessions, was as published on succeeding pages of this issue of the JOURNAL. At noon of the opening day, the usual informal get-together luncheon was held, which was attended by approximately 125 persons. Brief addresses were made by Mr. Loran Gayton, Chief Engineer of the City of Chicago, speaking for Mayor Edward J. Kelley; and Mr. Jack Miller, President and Business Manager of the Exhibitors' Association of Chicago. (A photograph was taken of the gathering, copies of which can be obtained by communicating with the General Office of the Society.)

On the evening of Wednesday, April 29th, the Semi-Annual Banquet and Dance of the Society was held in the Ball Room of the Edgewater Beach Hotel. After suitable introduction by President Tasker, the members were addressed by Professor C. G. Croneis, of the Department of Geology of the University of Chicago, on the subject, "Bringing Movies Down to Earth." The address embodied a description of the application of motion pictures to teaching geology in the classroom, and was accompanied by a demonstration film illustrating the phenomena of volcanic action.

Entertainment provided by the Balaban & Katz Corporation and the Edgewater Beach Hotel concluded the evening.

On the afternoon of Wednesday, April 29th, a conducted tour of inspection was made by a group of over 50 delegates to the Underwriters' Laboratories and the Bell & Howell factory. President A. R. Small of the Underwriters' Laboratories gave a brief, interesting talk about the work of these laboratories prior to the inspection trip. President Tasker responded on behalf of the Society.

### PAPERS PROGRAM

One of the interesting features of the Monday program was the paper by M. F. Jameson, T. E. Shea, and P. H. Pierce on "Photoelectric Cells and Their Method of Operation," in which were demonstrated various applications of photoelectric cells to the recording and reproduction of music and speech, as well as the varying characteristics of different types of cells under various forms of illumination.

The paper on "Stereoscopy on the Screen," by L. Lumière, was particularly interesting in view of the recent celebration in Paris and London in honor of Mr. Lumière, one of the pioneers of the motion picture and an Honorary Member of our Society.

Great interest was shown in a short sound x-ray motion picture and the paper prepared by Prof. R. Janker, of the University of Bonn, Bonn, Germany, and released through the courtesy of the Reichstelle für Unterrichtsfilm, the official body of the German Board of Education.

The paper by G. A. Morton on "The Electron-Image Tube" described a means of making infrared pictures visible, the subject of recent developments of the RCA Manufacturing Company under the supervision of Dr. Zworykin.

Considerable interest was aroused in the paper by G. L. Dimmick on the subject of "Increased Resolution in Sound Recording and Printing through the Use of Ultraviolet Light," which had been previously demonstrated at New York before the Atlantic Coast Section of the Society in March.

The papers by C. M. Mugler and D. P. Loye, on Tuesday morning, presented a description of current acoustical practices in the construction and operation of modern sound stages, and were very aptly followed by a study by H. H. Hall of the various classifications and processes of analyzing the content of sound waves.

The symposium on Lighting and Projection on Tuesday afternoon proved of considerable interest. Papers were included on "The Motion Picture Screen as a Lighting Problem" by M. Luckiesh and F. K. Moss, on the characteristics of projection light sources, and on theory, design, and use of photoelectric exposure meters. The report of the Projection Screen Brightness Committee summarized the data given at the symposium held at Washington in October, 1935, suggested a tentative standard of screen brightness, and outlined several problems for future work. The Projection Practice Committee reported on plans for further investigations relative to trade practices and theater conditions.

Motion pictures by the Dufaycolor process were first presented to the Society at the Atlantic City Convention in April, 1934. At the present convention improved examples of this process were demonstrated to the Society, and much interest was shown in the pleasing quality of the color rendition.

A paper on "Projection and Projectors," by A. J. Holman, dealt particularly with the difficulties attending the use of intermittent movements in projectors, and described in detail the single lens wheel, non-intermittent projector developed by the author. This model was considered to be a simplified and improved design compared with the one described before our Society by Mr. Holman in 1930.

A. H. Nuckolls and A. F. Matson described many of the chemical and physical characteristics of motion picture film from the standpoint of care in handling and storage to minimize hazards.

The morning of Thursday, April 30th, was devoted to a symposium on the slide-film, a subject that has assumed a great deal of importance during the past year in connection with visual education and commercial sales activities.

One of the interesting presentations on Thursday afternoon was that by I. R. Smith and C. E. Hamann on the subject of copper oxide rectifiers for supplying current to motion picture arcs. H. F. Olson gave a technical account of the development of a new type of microphone having uni-directional response char-

acteristics. Other papers during the session were devoted to descriptions of recent high-quality sound equipment and new types of amateur 16-mm. apparatus.

#### APPARATUS EXHIBIT

Although the display was not as large as at some previous Conventions of the Society, it nevertheless included a number of interesting exhibits and aroused considerable interest among those attending the Convention. Some of the equipment included will be described from time to time in succeeding issues of the JOURNAL. The following firms exhibited their new equipment: Ampro Corp., Bausch & Lomb Optical Co., Herman H. DeVry, Inc., Oscar B. Depue, Inc., Eastman Kodak Co., Electro-Acoustics Products Corp., Forest Manufacturing Corp., Hertner Electric Co., Motiograph, Inc., RCA Manufacturing Co., Weston Electrical Instrument Corp.

In addition, there were other companies whose equipment was not formally exhibited upon the exhibition floor, but was used from time to time during the Convention, providing the various facilities for conducting the sessions. These companies are named in the following paragraphs.

#### ACKNOWLEDGMENT

Credit for the success of the Convention was due largely to the efforts of Mr. W. C. Kunzmann, *Convention Vice-President*; Mr. J. I. Crabtree, *Editorial Vice-President*; Mr. G. E. Matthews, *Chairman* of the Papers Committee; Mr. H. Griffin, in charge of projection; Mr. J. Frank, Jr., in charge of installing the sound equipment; Mr. W. Whitmore, *Chairman* of the Publicity Committee; Messrs. C. H. Stone, S. A. Lukes, and H. Ellman, of the Local Arrangements Committee; Mr. E. R. Geib, *Chairman* of the Membership Committee; Mrs. C. H. Stone, *hostess*, in charge of the ladies' activities; and Projectionists' Local 110, I.A.T.S.E. Various other members of the Mid-West Section of the Society should be thanked for their efforts and coöperation toward making the Convention a success, among whom should be included Messrs. R. F. Mitchell and O. B. Depue. Thanks are due also to the management of the Underwriters' Laboratories and to the Bell & Howell Company for acting as hosts to the delegates on the tour of inspection held on Wednesday afternoon; and to the Balaban & Katz Corp. and the Edgewater Beach Hotel for providing the entertainment at the Semi-Annual Banquet on Wednesday evening.

The sound and projection equipment used for the technical sessions and during the film programs on Monday and Tuesday evenings was supplied and installed by the RCA Manufacturing Co.; International Projector Corp.; National Carbon Co.; Bausch & Lomb Optical Co.; National Theater Supply Co.; Raven Screen Co.; General Electric Co.; Joe Goldberg, Inc.; Electro-Acoustics Products, Inc.; Bell & Howell Co.; and Herman H. DeVry Corp.

Thanks are due to the Balaban & Katz Corp., and to the managements of the following theaters for courteously supplying passes to the members of the Society during the week of the Convention: Uptown Theater, Granada Theater, Riviera Theater, and Norshore Theater; and to the following firms for supplying films projected during the Monday and Tuesday evening programs: Chicago Film Board of Trade, Metro-Goldwyn-Mayer, Twentieth Century-Fox Film

Corp., Warner Bros., United Artists Corp., RKO Radio Pictures, Universal Pictures Corp., Columbia Pictures, Paramount Pictures, Audio Productions, Inc., and General Motors Corp.

## PAPERS PROGRAM

MONDAY, APRIL 27th

### 10:00 a.m. Business and Technical Session.

Address of Welcome; H. G. Tasker, *President*.

Report of the Convention Committee; W. C. Kunzmann, *Convention Vice-President*.

Report of the Membership Committee; E. R. Geib, *Chairman*.

Report of the Papers Committee; G. E. Matthews, *Chairman*.

Report of the Progress Committee; J. G. Frayne, *Chairman*.

"Organization and Work of the Film Library"; J. E. Abbott, The Museum of Modern Art Film Library, New York, N. Y. (*Demonstration*)

"Stereoscopy on the Screen"; L. Lumière, Paris, France.

### 12:30 p.m. Informal Get-Together Luncheon.

Addresses by Mr. Loran Gayton, Chief Engineer, City of Chicago; Jack Miller, President and Business Manager, Exhibitors Association of Chicago.

### 2:00 p.m. Sound Session: S. K. Wolf, *presiding*.

"Photoelectric Cells and Their Method of Operation"; M. F. Jameson, T. E. Shea, and P. H. Pierce, Bell Telephone Laboratories, Inc., New York, N. Y. (*Demonstration*)

"The Technical Basis for X-ray Cinematography"; R. Janker, Surgical Clinic, University of Bonn, Bonn, Germany. (*Demonstration*)

"Harmonic Distortion in Variable-Density Recording"; B. F. Miller, Warner Bros. Pictures Corp., Hollywood, Calif.

"The Electron-Image Tube: A Means of Making Infrared Pictures Visible"; G. A. Morton, RCA Manufacturing Co., Inc., Camden, N. J. (*Demonstration*)

"Increased Resolution in Sound Recording and Printing through the Use of Ultraviolet Light"; G. L. Dimmick, RCA Manufacturing Co., Inc., Camden, N. J. (*Demonstration*)

### 8:00 p.m. Film Program.

Exhibition of recent outstanding feature and industrial motion pictures.

TUESDAY, APRIL 28th

### 10:00 a.m. Acoustics and Sound Equipment Session.

"The Acoustic Design of Music Scoring Stages"; C. M. Mugler, Acoustical Engineering Co., Los Angeles, Calif.

"Acoustic Considerations in the Construction and Use of Sound Stages"; D. P. Loye, Electrical Research Products, Inc., Los Angeles, Calif. (*Demonstration*)

"Action Is Needed"; F. H. Richardson, New York, N. Y.

Report of the Standards Committee; E. K. Carver, *Chairman*.

"Recent Improvements in the Variable-Width Recording System"; B. Kreuzer, RCA Manufacturing Co., Inc., New York, N. Y.

"Analysis of Sound Waves"; H. H. Hall, Cruft Laboratory, Harvard University, Cambridge, Mass.

**2:00 p.m. Lighting and Projection Symposium: L. A. Jones, *presiding*.**

"The Motion Picture Screen as a Lighting Problem"; M. Luckiesh and F. K. Moss, General Electric Co., Cleveland, Ohio.

"Color Quality of Light from Some Incandescent Lamps"; R. E. Farnham and R. E. Worstell, General Electric Co., Cleveland, Ohio.

"Present Trends in the Application of the Carbon Arc to the Motion Picture Industry"; W. C. Kalb, National Carbon Co., Inc., Cleveland, Ohio.

"Theory, Design, and Use of Photoelectric Exposure Meters"; A. T. Williams, Weston Electrical Instrument Corp., Newark, N. J.

"A 13.6-Mm. Super-High-Intensity Carbon"; D. B. Joy, National Carbon Co., Inc., Fostoria, Ohio.

Report of the Projection Screen Brightness Committee; C. Tuttle, *Chairman*.

Report of the Projection Practice Committee, H. Rubin, *Chairman*.

**8:00 p.m. Special Sound Demonstration.**

Exhibition of recent outstanding feature pictures and short subjects.

**WEDNESDAY, APRIL 29th**

**10:00 a.m. Laboratory and Projection Session.**

Report of the Committee on Preservation of Film; J. G. Bradley, *Chairman*.

"A Film Emulsion for Making Direct Duplicates in a Single Step"; W. Barth and F. Schoeck, Agfa Ansco Corp., Binghamton, N. Y. (*Demonstration*)

"Projection and Projectors"; A. J. Holman, East Orange, N. J.

"Some Properties of Motion Picture Film"; A. H. Nuckolls and A. F. Matson, Underwriters' Laboratories, Chicago, Ill.

Report of the Color Committee; J. A. Ball, *Chairman*.

"Color Prints on a Screen-Film by the Negative-Positive Method"; W. H. Carson, Dufaycolor, Inc., New York, N. Y.

"A Sound Picture Reproducing System for Small Theaters"; G. Puller, Bell Telephone Laboratories, Inc., New York, N. Y.

**2:00 p.m. Visits to the Underwriters' Laboratories, Bell & Howell Co., and Wilding Picture Productions, Inc.**

**7:30 p.m. Semi-Annual Banquet.**

Address by Professor C. G. Croneis, Department of Geology, University of Chicago, Chicago, Ill.; "Bringing Movies Down to Earth."

**THURSDAY, APRIL 30th**

**10:00 a.m. Slide-Film Symposium and Non-Theatrical Session: S. K. Wolf, *presiding*.**

"Visual Education and Slide-Films"; J. B. MacHarg, Professor of American History, Lawrence College, Appleton, Wis. (*Demonstration*)

- "Slide-Films for Use in the Extension Division of the U. S. Department of Agriculture"; C. H. Hanson, Extension Service, U. S. Department of Agriculture, Washington, D. C. (*Demonstration*)
- "Improvements in Slide-Film Projectors"; Miss Marie Witham, Society for Visual Instruction, Chicago, Ill.
- "Development of Sound Slide-Film Equipment"; F. Freimann, Electro-Acoustic Products Co., Fort Wayne, Ind. (*Demonstration*)
- Report of the Committee on Non-Theatrical Equipment; R. F. Mitchell, *Chairman*.
- "The Business Screen—Some Demands Made upon It"; W. F. Kruse, Bell & Howell Co., Chicago, Ill. (*Demonstration*)

**2:00 p.m. Apparatus and Equipment Session: S. K. Wolf, *presiding*.**

- "Photographic Race-Timing Equipment"; F. Tuttle and C. H. Green, Eastman Kodak Co., Rochester, N. Y.
- "Use of Motion Pictures in an Accurate System for Timing and Judging Horse Races"; H. I. Day, New York, N. Y. (*Demonstration*)
- "Demonstration of 1000-W. 16-Mm. Filmosound Projector"; R. F. Mitchell and W. L. Herd, Bell & Howell Co., Chicago, Ill.
- "The Model *E* Kodascope"; A. E. Schubert and H. C. Wellman, Eastman Kodak Co., Rochester, N. Y.
- "Copper Oxide Rectifier for Motion Picture Arc Projection"; (*Part A*) I. R. Smith, Westinghouse Electrical & Manufacturing Co., East Pittsburgh, Pa. (*Part B*) C. E. Hamann, General Electric Co., Bridgeport, Conn.
- "A New Monitoring Telephone Receiver"; H. F. Olson, RCA Manufacturing Co., Inc., Camden, N. J.
- "A New Rotary Stabilizer Sound Head"; F. J. Loomis and E. W. Reynolds, RCA Manufacturing Co., Inc., Camden, N. J.
- "A Uni-Directional Microphone"; H. F. Olson, RCA Manufacturing Co., Inc., Camden, N. J.
- "The Magazine Ciné-Kodak"; O. Wittel, Eastman Kodak Co., Rochester, N. Y.
- "The Pull-Down Movement"; A. S. Newman, London, England.