HIGHLIGHTS OF THE CONVENTION

CHALFONTE-HADDEN HALL, ATLANTIC CITY, N. J., APRIL 22–25, 1940

Although the attendance at the Atlantic City Convention at Chalfonte-Haddon Hall, April 22 to 25th, inclusive, was not quite up to normal, it consisted almost 100 per cent of members who came with the sole intention of hearing the technical papers, as was indicated by the very full attendance at the technical sessions and the interesting and lengthy discussions which followed. On Monday and Tuesday the sessions ran until after midnight, and on Wednesday and Thursday until 6:00 P. M.

The total registered attendance was in the neighborhood of 150 persons; the attendance at the luncheon on Monday noon was about 120; and at the banquet on Wednesday evening, approximately 130.

The Convention opened on Monday morning under the chairmanship of President Williford, with reports of the Financial and Engineering Vice-Presidents and a brief welcome by Mr. Williford. After a report of the Studio Lighting Committee by E. C. Richardson, *Chairman*, which elicited considerable discussion on the activities of the studios, Dr. H. P. Gage presented a lecture on the various color theories and the specifications of color according to the standard Atlases of Color and the National Formulary sponsored by the American Pharmaceutical Association. Dr. Gage concluded his address with a description of the aims and functions of the Inter-Society Color Council.

The informal get-together luncheon was held in the Benjamin West Room of Haddon Hall, and the proceedings opened with a few words of welcome by President Williford and the introduction of Major W. T. Casey, who spoke in place of the Hon. Chas. D. White, Mayor of Atlantic City, who was unable to attend because of illness. Mr. Casey was followed by Mr. Thomas L. Husselton, Secretary-Director of the Chamber of Commerce in Atlantic City. The principal speaker was Mr. Thomas F. Joyce, Vice-President of the RCA Manufacturing Co., Camden, N. J., who spoke on "The General Outlook for Television." Mr. Joyce's discussion centered principally about the possible applications of television and the way in which it could be woven into our general activities, and the many ways in which its uses were affiliated with the activities of the motion picture industry.

The afternoon of Monday, April 22nd, was devoted to a session of papers on sound, including a discussion of "The Control of Sound in Theaters and Preview Rooms," by C. C. Potwin, and a presentation by W. A. Mueller of an investigation of the influence of "Audience Noise as a Limitation to the Permissible Volume Range of Dialog in Sound Motion Pictures." Mr. Potwin's paper was concerned primarily with the design of theaters from the acoustical point of view prior to their construction, with the idea of rendering unnecessary many of the alterations and the installation of acoustical materials, after the construction of the theater,

in order to correct acoustical errors arising in the design of the theater. Mr. Mueller's paper, on the other hand, was concerned with the effect of the audience upon the possibility of obtaining adequate volume range in the recordings, pointing out that the lowest volume level practicable was determined by the audience noise which varied according to the moods of the audience. This likewise makes necessary a compression of the volume range which detracts from the dramatic value of the production.

On Monday evening, Dr. Matthew Luckiesh, Director of the Lighting Research Laboratory of the General Electric Company, Cleveland, Ohio, delivered a lecture on "The Science of Seeing." He covered rather broadly the many principles involved in acuity or vision and comfortable seeing, taking in such factors as brightness of the objects being viewed, contrast with neighboring objects, effect of the general environments of the objects, and the physiological and psychological influences affecting seeing.

The morning of Tuesday, April 23rd, opened with two papers on tone reproduction: Dr. L. A. Jones of the Eastman Kodak Company discussed "Photographic Tone Reproduction—Theory and Practice," and Mr. I. G. Maloff of RCA Manufacturing Company discussed tone reproduction in television. The session was concluded by a paper by Prof. E. H. Armstrong of Columbia University on "Frequency Modulation," in which Prof. Armstrong reviewed the development of the frequency modulation system and its possible effect and applications to modern radio transmission. Reference was made also to the possibility of using the system for the transmission to central motion picture recording studios of sound picked up on locations.

In the afternoon (April 23rd), Mr. J. A. Dubray, chairman of the Mid-West Section of the Society, acted as chairman of the 16-mm session. Papers by L. Thompson of the Calvin Company and J. F. Clemenger and F. C. Wood of Sound Masters, Inc., discussed direct 16-mm production and 16-mm equipment and practice. J. A. Maurer in a paper on commercial motion picture production with 16-mm equipment surveyed broadly the equipment, films, and services available for 16-mm production and presented a critical evaluation of the methods now in use. It was revealed that there is an increasing tendency to make negatives directly onto 16-mm film in the studio, which are then developed by reversal to positives. The duplicate negative is then made on fine-grain duplicating film and release prints then made by contact printing. A demonstration was made by projecting a 16-mm Kodachrome film onto a 14-ft. screen and the sound and picture quality was of such excellence as to be adequate for small theaters. The session was concluded by a paper by D. B. Joy and W. W. Lozier of the National Carbon Company, describing a new high-intensity carbon arc for the projection of 16-mm film.

Five interesting papers constituted the television symposium held on the evening of Tuesday, April 23rd. Mr. H. R. Lubcke of the Don Lee Broadcasting System described the television pick-up of the Pasadena Rose Tournament Parade, by means of the RCA portable television pick-up equipment later described by G. L. Beers, O. H. Schade, and R. E. Shelby. The latter equipment was demonstrated on the stage of the meeting room. In addition, W. C. Eddy of the National Broadcasting Company demonstrated some very novel remote control television lighting equipment used in the NBC television studios at New York.

An additional demonstration at the session was given by T. T. Goldsmith, R. L. Campbell, and S. W. Stanton of the DuMont Laboratories, of a new method of synchronization of television systems. Synchronizing standards were discussed that permit both flexible and automatic operation of television systems. P. C. Goldmark and J. N. Dyer discussed the question of quality of television pictures, with respect to artificial or "idealized" pictures produced by a scanning device designed for the purpose, which revealed that it is theoretically possible to obtain much better definition than is now being obtained with the 441-line images. Both morning and afternoon of April 24th were devoted to the problems of projection, under the chairmanship of Mr. H. Griffin. A noteworthy aspect of the projection sessions was the number of projectionists in attendance; and, despite the fact that the sessions were long, the attendance was good throughout the entire day. Mr. F. H. Richardson, in a comprehensive paper, traced the evolution of the projector from the original Thomas Armat machine to the present-day instruments. Of special interest was the paper by A. C. Downes, of the National Carbon Company, on gases from carbon arcs and their effects. The paper reviewed work done in various laboratories on the products of combustion from carbon arcs used in motion picture projection, presenting analyses of the gases coming from various lamps and showing that, even in the lamp house stacks, the only gas occurring in toxic concentration is nitrogen dioxide. Studies of ventilation under controlled conditions show that even with very low rates of renewal of the air in lamp houses and projection rooms, there is no danger of gases or fumes attaining toxic concentrations.

The paper by W. C. Kalb on "Progress in Projection Lighting" traced the improvement in the illumination provided by motion picture arc lamps for projection from the very early days of the arc to the present, showing a steady improvement with the development of successive types of arcs and lamp houses both as to the quantity of light delivered, the cost of carbon consumption, and other factors. Mr. C. S. Ashcraft described in considerable detail the "Cyclex" system of motion picture projection, which employs an alternating current arc with a shutter so arranged as to avoid the periodic "visual beat" generally occurring in alternating current projection systems. Other papers by T. P. Hover, B. Schlanger, and J. R. Prater discussed the general operation of the projection room and the work of the projectionists.

In a paper entitled "Speed Up Your Lens Systems," W. C. Miller of Paramount Studios described the effects resulting from the application of the new non-reflecting coatings applied to camera lenses. The reduction of reflections in optical systems so treated has been so great that ghosts and flares are now rarely encountered, as was demonstrated by a film produced with a camera employing treated lenses.

On the evening of Wednesday, April 24th, in the Rutland Room of Haddon Hall, was held the 46th Semi-Annual Banquet and Dance. The evening was devoted solely to dancing and entertainment.

On Thursday morning, April 25th, Messrs. E. W. Kellogg and R. O. Drew of RCA Manufacturing Company presented a discussion on "The Filtering Factors of the Magnetic Drive," supplemented by an interesting demonstration of a device designed to introduce into a sound recording "wows" of all various magni-

tudes and frequencies. The resulting wows were then measured by means of a "wowmeter."

Other interesting papers by J. G. Frayne, V. Pagliarulo, and G. R. Crane of Electrical Research Products, Inc., dealt with the effects of ultraviolet light on variable-density recording and printing, and the description of a precision integrating sphere densitometer. A paper by J. Robbins described a silent variable-speed treadmill used in the Paramount Studios in connection with process background photography. Constructional details, speeds, degrees of silence, and other factors were covered in the paper.

Mr. D. E. Hyndman presided over the concluding session of the convention, which opened with a description by C. E. Ires and E. W. Jenson of a number of improved devices for use in motion picture laboratories. G. R. Alburger presented a mathematical expression of developer behavior intended to unify the characteristics of developing agents in a mathematical way. The use of such analyses has been helpful in providing a guide toward modifying developers for producing given photographic characteristics. The new processing laboratory of Warner Bros. First National Studios at Burbank, Calif., was described in considerable detail by Messrs. G. M. Best and F. R. Gage.

A very comprehensive paper by R. B. Atkinson and V. C. Shaner of Eastman Kodak Company dealt in considerable detail with the chemical analyses of photographic developments and fixing baths, describing the identifying reactions of developing agents and their quantitative determination.

ACKNOWLEDGMENTS

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Thanks are due to Messrs. H. Griffin and M. C. Batsel for providing the projection equipment and public address systems used at the meetings. The Society extends its thanks also to Mrs. O. F. Neu, Hostess, and members of the Ladies' Committee, for their efforts in arranging an interesting program for the ladies attending the convention.

The Society is indebted also to the Wielland & Lewis Theaters, Inc., and to Warner Bros. Theaters, Inc., for the passes issued to the delegates to the Convention to the Apollo, Strand, Stanley and Virginia Theaters; and to Local 310 IATSE for providing the projectionist for the meetings.