ABSTRACTS

The Editorial Office will welcome contributions of abstracts and book reviews from members and subscribers. Contributors to this section are urged to give correct and complete details regarding the reference. Items which should be included in abstracts are:

Title of article
Name of author as it appears on the article
Name of periodical and volume number
Date and number of issue
Page on which the reference is to be found

In book reviews, the following data should be given:

Title of book
Name of author as it appears on the title page
Name of publishing company
Date of publication
Edition
Number of pages and number of illustrations

The customary practice of initialing abstracts and reviews will be followed. Contributors to this issue are as follows: George P. Silberstein, and the Monthly Abstract Bulletin of the Kodak Research Laboratories.

Children's Theater and Children's Films. *Intern. Rev. Ed. Cinemat.*, **2,** April, 1930, p. 435. A report of the International Institute to the Child Welfare Committee considers the problem of production of special films for children and their presentation. An investigation discovered that children do not care for special films, produced usually with an erroneous idea of their mentality. Special children's shows have usually failed in the various countries. The adults in charge of the children will not attend these shows. The production of these films calls for the coöperation of the psychologist, artist, and producer.—*Kodak Abstr. Bull.*

The Picture and Education. T. RAMSAYE. *Ed. Screen*, **9,** May, 1930, p. 134. An address before the Visual Instruction Section of the Ohio State University Educational Conference. Motion pictures are more adapted to mass education than textbooks. The present motion picture industry is purely an amusement industry and must not be looked to for the development of visual educational technic.—*Kodak Abstr. Bull.*

Talking Film of Surgical Dissection Made in Sixteen Millimeter. *Ex. Herald World*, **99,** May 24, 1930, p. 41. A dissection requiring six weeks to complete was photographed on two reels of amateur standard film, after which a synchronized sound record was made on a disk.—*Kodak Abstr. Bull.*

Scholastic Films in Austria. E. SCHOBER. *Intern. Rev. Ed. Cinemat.*, **2,** April, 1930, p. 417. There are 14 permanent theaters devoted to scholastic motion pictures in Vienna and 46 throughout Austria. The Scholastic Cinematographic Guild is an organization of schoolmasters, whose subsidiary, the Scholastic Cinematographic League, is producing various experimental films. The Cine-

matographic Seminary (1928) is undertaking a study of the principles of teaching by films. The Austrian Cinematographic Archive is gradually accumulating scholastic films for rental.—*Kodak Abstr. Bull.*

Movie Camera: An Aid in Search for the "One Best" Method. A. H. MOGENSEN. *Factory*, **79,** June, 1930, p. 1310. With the development of fast lenses and panchromatic film for amateur standard cameras, motion pictures of time study work or "micromotion studies" have been used to a great extent in industrial plants. Time recording is accomplished in one of two ways: (1) photographing a rapidly moving clock of microchronometer simultaneously with the operation; and (2) using a constant speed camera. In the latter method film is run through at 1000 frames per minute so that each picture is made 0.001 minutes later than the preceding one. In addition to motion analysis, this method may also be used in teaching old operators or training new ones.—*Kodak Abstr. Bull.*

Modern Laboratory. *Cinematography*, **1,** April, 1930, p. 13. This article describes a new, modern film processing laboratory located in New York City. Interior walls are finished throughout in white tile. The building is heated by oil burners and is equipped with a refrigeration plant. Air is filtered before entering the workrooms and is automatically kept at constant humidity. The developing rooms are equipped with machines for both negative and positive processing. The laboratory has been equipped for sensitometric work and has a projection room, fitted with sound reproducing apparatus. A number of illustrations of the new plant are shown.—*Kodak Abstr. Bull.*

World's Biggest Auditorium: Atlantic City Auditorium. *Kinemat. Weekly*, **159,** May 15, 1930, p. 67. The large ballroom of the Atlantic City auditorium has recently been equipped by Western Electric to show talking pictures. This auditorium, which covers nearly five acres, has a public address system installed comprising four sets of horns. These are arranged as follows: one set on the stage with six horns with twenty units, which are ordinarily connected to five amplifiers; one set in each of two gondolas, attached to the ceiling, each with twenty-five speaker units; and another set on the projectolier. The reproducing of sound has been planned so that a relay switching arrangement allows any set of horns to be used.—*Kodak Abstr. Bull.*

RCA's Sound Studio on Wheels Permits High Speed Shooting. *Ex. Herald World*, **99,** May 24, 1930, p. 42. This sound recording and camera equipment is housed completely within two trucks, one containing the power supply and the other the recording apparatus. The recording equipment is identical with that used in the studios and all parts can be removed from the truck for installation if so desired. Two complete recording units of 1000 feet of film capacity are provided, permitting synchronization with a maximum of six cameras. A film conditioning cabinet is provided having a capacity of 16,000 feet of film.—*Kodak Abstr. Bull.*

New Color Firm to Start Operations. *Film Daily*, **52,** June 1, 1930, p. 1. A color process is announced, called Supercolor, which is stated to be a revival of the old Kinema-color process.—*Kodak Abstr. Bull.*

French Engineers Invent Outdoor Daylight Screen. *Film Daily*, **52,** June 22, 1930, p. 12. The device consists of an ordinary opaque or transparent screen in front of which is placed a frame holding rows of very thin, bright metal blades arranged perpendicularly to the screen surface. The blades, not visible to the

spectator, catch light obliquely, and cast shadows on the screen.—*Kodak Abstr. Bull.*

Obtaining Relief in Cinematography. J. DE LASSUS. *Bull. soc. franc. phot.*, **16,** December, 1929, p. 315. One of the most successful artifices adopted for imparting a stereoscopic effect to motion pictures is to move the camera while the optical axis is made to pass through the central point of interest in space. This article announces a device by which the optical axis is directed automatically, whatever the displacement of the camera. The apparatus is not described.—*Kodak Abstr. Bull.*

New Cameras for Sixteen Millimeter Film. *Phot. Dealer*, **44,** March, 1930, p. 132. A description is given of the new models C and D of the Ciné Nizo amateur cameras. Both models have four speed motor control and may be hand cranked as well as motor driven. The motor runs off 35 feet at one winding. The model C is fitted with a locking device which may be used either as a safety catch or for fixing the motor for continuous pictures. A single claw pull-down is used. An interchangeable lens mount on both models permits the use of lenses other than the *f*/3 fixed focus lens regularly supplied.—*Kodak Abstr. Bull.*

Spools and Film Threading. *Amat. Phot.*, **69,** May 28, 1930, p. 490. Various types of 16 mm. projection spools are described. An aid to threading is the Hayden "self-threading finger," a V-shaped piece of metal which is fixed to the end of the film, and is easily threaded into the spool slot.—*Kodak Abstr. Bull.*

Keeping the Light Mask Free from Dust. *Cinema*, **34,** May 7, 1930, p. xxvii. The difficulty of keeping the light slit free from dust and film scrapings during the reproduction of sound film is overcome (according to a recently patented method) by forming the aperture by the tangential approach of the circumferences of two rings. The rings are rotated in opposite directions so that the portions not actually forming the aperture can be wiped by mechanical means.—*Kodak Abstr. Bull.*

New Shutters for Old: Rear Shutter for the Older Model of Simplex. F. H. RICHARDSON. *Ex. Herald World*, **98,** Feb. 22, 1930, p. 41. The author gives a description of a rear shutter for older model Simplex projectors with directions for its installation. It is claimed that the rear shutter will decrease heat on the film gate by 75 per cent, thus lowering the danger of fire.—*Kodak Abstr. Bull.*

Variable Focus Lens. *Ex. Herald World*, **98,** Section 2, Jan. 18, 1930, p. 37. This lens eliminates the necessity of changing lenses or shifting the projector when changing from silent to sound film. A ring on the lens mount is turned to enlarge the image and bring it over to the same part of the screen occupied by the silent image.—*Kodak Abstr. Bull.*

Silent Worm Drive. M. C. MARSH. *J. Sci. Instr.*, **7,** May, 1930, p. 171. The use of an ebonite worm driving a metal wheel reduces noise considerably at high speeds. Water lubrication is employed.—*Kodak Abstr. Bull.*

Latest Developments in Wide Film Pictures. E. I. SPONABLE. *Electronics*, **1,** May, 1930, p. 65. A thorough study is made of the advantages of several proposed sizes of wide film over the present standard size. A discussion of the change in sound recording technic made possible by the use of wider sound tracks is also included in the article. G. P. S.

Cost of Wide Film Change. *Bioscope* (*Mod. Cinema Technique*), **83,** May 14, 1930, p. i. It is estimated that it would cost about £6,000,000 for the motion

picture industry to change to wider films, of which sum two-thirds would be expended in changing theater equipment.—*Kodak Abstr. Bull.*

Theater for Wide Films Built at RKO Studios. *Ex. Herald World*, **98**, Section 1, Jan. 18, 1930, p. 35. A theater one story high has been constructed at the RKO studios for showing wide film pictures by the Spoor-Bergren process on a screen $22^1/_2$ by 46 feet. The theater is 45 by 115 feet in size. A new structure housing four sound stages is being completed which is 500 feet long, 150 feet wide, and five stories high. The theater and stage will occupy an entire end of this large building.—*Kodak Abstr. Bull.*

A British "Re-Sync-er." *Bioscope* (*Mod. Cinema Technique*), **83**, April 30, 1930, p. viii. This resynchronizing device for motion picture projection using sound-on-disk system consists of a footage counter and a dial graduated into 16 sections, each of which corresponds to a frame. The device is attached to the 90 foot per minute spindle of the projector by means of a flexible drive shaft. The footage counter is set to correspond with the edge number on the film before the projector is started, and thereafter the exact frame and foot passing the aperture can be detected at once. The equipment can be used for quick resynchronization following a film break, for change overs, and for signaling the orchestra leader if "play in" music is desired.—*Kodak Abstr. Bull.*

Care in Handling Sound Film. *Kinemat. Weekly*, **159**, May 29, 1930, p. 69; *Ex. Herald World*, **99**, May 24, 1930, p. 40. Stringent rules enforced in the Exchange Maintenance Dept. of Metro-Goldwyn-Mayer to ensure the careful handling of motion picture film are reprinted in full. White cotton gloves are provided and must be worn on both hands while film is being inspected. Rings on the fingers are prohibited, regardless of whether they are covered with gloves. The film is to be held for inspection between the thumb and first finger, with the hand under the film palm upward. Every splice made in the department must be stamped with the Metro-Goldwyn-Mayer embossing machine. Detailed rules are given for the splicing of sound film.—*Kodak Abstr. Bull.*

Messterphon-Messtronom-Chronomesster. O. MESSTER. *Kinotechnik*, **11**, Nov. 20, 1929, p. 592. After a description of some early motion picture-with-sound equipment devised by the author, he leads up in a brief manner to the situation existing at the date of publication in Germany, finally describing the equipment figuring in the title. The Messterphon is a sound record disk turntable with a differential drive gear for resynchronization. The author praises the simplicity of the use of disk records and equipment utilizing disks. The Messtronom is a synchronized rewind device for paper ribbon music notes for the orchestra director. The Chronomesster is a chronometer for synchronization at distant points of radio speeches with film exhibitions and the like.—*Kodak Abstr. Bull.*

The Problems of Printing. A. YOUNG. *Cinematography*, **1**, April, 1930, p. 14. A short historical review prefaces an account of the development of combined sound record and picture printers. Both positive stock and negative film are handled in light-tight heads, thus permitting use of the printer in daylight. Speed control, reverse motion, and dissolve mechanism are included as features of the printer.—*Kodak Abstr. Bull.*

New Disk May Soon Eliminate Complaint of Express Costs. D. FOX. *Ex. Herald World*, **99**, May 24, 1930, p. 17. A 16 inch record containing several

hundred grooves to the inch will play for 72 minutes. It is called the Micro Disc record. Another type of phonograph record is being marketed for 15 cents and consists of a composition substance called "durium" mounted on a paper back. The author suggests that the problem of shipping disk records now used for sound-on-disk motion pictures would be greatly simplified if micro disk records could then be packed directly in the can with the film or mailed separately in envelopes.—*Kodak Abstr. Bull.*

Recording the Sound Pictures. T. E. SHEA. *Bell Lab. Record*, **8**, April, 1930, p. 356. A detailed but popular article dealing with the equipment, personnel, and technic of recording a sound picture by the Western Electric system.—*Kodak Abstr. Bull.*

Acoustics of the Sound Film Studio. C. W. GLOVER. *Kinemat. Weekly*, **159**, May 22, 1930, p. 51. A description of a method is given whereby a studio (British Filmcraft Production, Ltd.), originally designed for silent films, was converted into one suited for the taking of sound pictures, despite the fact that the original construction of the building prevented the use of massive structures to provide sound insulation. A description of the construction of a new sound studio (Associated Sound Film Industries, Ltd.), including a method of building an effective sound trap in the roof is also given. G. P. S.

Calculating Reverberation (Correspondence). C. W. GLOVER. *Kinemat. Weekly*, **159**, May 8, 1930, p. 67. A comparison is given of the results obtained when the reverberation formula of Morris and Eyring (*Kinemat. Weekly*, **158**, April 10, 1930, p. 62), and two formulas due to P. E. Sabine were applied to such varied buildings as a church, a concert hall, and a highly damped studio. A curve whose use minimizes the calculation involved in applying Sabine's formulas is also given. G. P. S.

Seats as an Aid to Uniform Acoustical Conditions in Theaters. W. K. FRIEND. *Ex. Herald World*, Section 2, **98**, Feb. 15, 1930, p. 29. Seats should be made of materials which absorb nearly as much sound as a person. Three types of seats are analyzed according to their absorption characteristics using the Sabine mathematical equation. Reverberation data for each type are included.—*Kodak Abstr. Bull.*

Real Images in Pictures without Film Perform at Television Show. *Ex. Herald World*, **99**, Section 1, May 31, 1930, p. 102. A group of actors going through their act at the General Electric Studio were "televised" to a theater half a mile away and their images projected upon a six foot screen before an audience. The voices and sounds were transmitted by radio. It is stated that the images swayed slightly during projection. The process is that developed under the direction of V. F. W. Alexanderson and the larger screen presentation was made possible through the use of a light valve.—*Kodak Abstr. Bull.*