R. Paul Ireland, of the Engineering Development Laboratories, presented the first paper on "A New 16-Mm Sound-Track Reader," which described a small self-contained unit 6 × 6 × 6 inches, including amplifier and speaker which may be placed between a pair of rewinds to edit 16-mm sound film. Mr. Ireland's discussion was followed by a demonstration of the equipment.

"Comparison of Lead-Sulfide Photoconductive Cells with Photoemissive Cells Especially with Respect to Source Color Temperature," was then given by Norman Anderson, of the Continental Electric Company, Geneva, Illinois.

Ralph W. Engstrom, of the Gas-Tube and Phototube Division, Engineering Department, Radio Corporation of America, RCA Victor Division, Lancaster, Pennsylvania, presented a paper on what RCA is doing about the lead-sulfide cell for motion picture uses. He discussed proposed standards in tube design and characteristics.

Discussion from the floor followed these papers with Mr. Anderson and Mr. Engstrom answering the questions.

Current Literature

THE EDITORS present for convenient reference a list of articles dealing with subjects cognate to motion picture engineering published in a number of selected journals. Photostatic or microfilm copies of articles in magazines that are available may be obtained from The Library of Congress, Washington, D. C., or from the New York Public Library, New York, N. Y., at prevailing rates.

American Cinematographer
29, 2, February, 1948
Photographic Highlights of 1947 (p. 43) G. E. MATTHEWS
New Services Launching 16-Mm Television Newsreels (p. 53)
The Cinema Workshop. Pt. 20. Distributing Your Film (p. 58) C. LORING
DeVry Introduces Lightweight 16-Mm Projector (p. 63)

British Kinematography
12, 1, January, 1948
The Law of Copyright and the Film (p. 1) A. KRESTIN
The Technical Design of the Projector (p. 13) R. ROBERTSON

Electronics
21, 3, March, 1948
Television Receiver Laboratory (p. 86) F. R. NORTON

La Cinématographie Française
30, 1239, December 27, 1947
Cinquante Ans de Cinéma Pathé (Fifty Years of the Pathé Cinema) (p. 33)

TECHNIQUE ET MATÉRIEL

Les futurs developpements du cinéma en couleurs (Future developments of color motion pictures) (p. III)

International Projectionist
23, 2, February, 1948
Black-and-White vs. Color Cinematography (p. 7) J. VALENTINE
16-Mm Projection: from Purchase to Picture (p. 14)

PSA Journal
14, 2, February, 1948
Photographic Reversal Effects (p. 107) E. P. WIGHTMAN

Electronic Engineering

20, February, 1948

Noiseless Sound Recording Equipment (p. 48)

The New Television Camera (p. 59) C. P. S. EMITRON

Commercial Disk Recording and Processing (p. 61)

Radio News

39, 3, March, 1948

Television—Exclusively! (p. 48) M. ALTH

The Recording and Reproduction of Sound. Pt. 13 (p. 62) O. READ

Interference Traps for Television (p. 70) S. N. FINLEY

Ideal Kinema

14, February 12, 1948

Television Sweep Circuits. Their Function and Operation. Pt. 1 (p. 23) A. BUCKLEY

When the Film Found Its Voice (p. 25)

International Photographer

20, 2, February, 1948

50,000 Feet of Commercial Kodachrome Used in Filming Pineapple Industry (p. 18)

Kodak Building "Photo-Memory" for Navy Electronic "Brain" (p. 29)

IN RECENT ISSUES of the *Philips Technical Review*, there have appeared articles which should prove of great interest to the motion picture engineer. A summary of one of these papers is given below.—THE EDITOR

DETERMINING THE LIGHT DISTRIBUTION AND LUMINOUS FLUX OF PROJECTORS

BY J. BERGMANS AND H. A. E. KEITZ

In every illuminating engineering laboratory instruments are used for registering the distribution of light from light sources emitting rays in all directions. The light source is suspended in a certain fixed position, the luminous intensity (candle power) is measured in several meridian planes, a polar graph of the light distribution is plotted and from that one calculates the total flux (usually with the aid of a Rousseau diagram). In the case of projectors this method is not directly applicable. If it is a small projector emitting a very narrow beam, the light source can be set up in a fixed position and the light distribution determined by means of a number of isolux curves on a projection screen perpendicular to the optical axis of the beam, the flux then being found by integration. In all other cases the photometer has to be set up in a fixed position and the light beam moved in such a way that each part of the beam is successively thrown on the photometer; for this purpose two different types of rotating apparatus are used. From the results of the measurements taken an isocandle diagram can be obtained. Before the luminous flux can be determined that diagram has to be reproduced on a flat plane, employing the sinusoidal method or Lambert's azimuthal reproduction, both of which are area-proportional. It has advantages when the measurements are so carried out that the successive directions of measurement lie on a conical surface around the optical axis of the light beam. To make this possible Philips Laboratory for Illuminating Engineering has constructed and is using a special rotating apparatus, which is described in this article. (*From Volume* 9, *Number* 4)