

Society Announcements

Progress Medal Award

The SMPE Progress Medal Award is presented to an individual in recognition of his technical contributions to the motion picture industry. This is an annual award; however, it need not be presented in any given year if the Progress Medal Award Committee feels that there is no qualified candidate. Candidates may be proposed by any member of the Society as outlined in the formal committee procedure on page 409 of this issue of the Journal.

Proposals for consideration by the committee may be addressed to any member of the committee which is listed below, but must be received prior to May 15, 1948.

H. B. Braun, Radio City Music Hall, Rockefeller Center, N. Y. 20, N. Y.

R. M. Corbin, Eastman Kodak Company, Rochester, N. Y.

W. C. Miller, Metro-Goldwyn-Mayer, Culver City, Calif.

F. E. Carlson, General Electric Co., Nela Park, Cleveland 12, Ohio.

John W. Boyle, 139 $\frac{1}{2}$ Doheny Dr., Los Angeles 36, Calif.

The Progress Medal was inaugurated during the term of office of President J. I. Crabtree but much credit is due Mr. G. E. Matthews, the then chairman of the Historical Committee, for his efforts in obtaining an outstanding design. Sketches for the proposed medal were submitted by some of the better-known artists in New-York City but these were mostly conventional featuring the laurel wreath. Fortunately Mr. Alexander Murray, a co-worker with Messrs. Crabtree and Matthews in the Research Laboratories of the Eastman Kodak Company, became interested in the problem and submitted a unique design incorporating many symbols peculiar to the photographic and motion picture art and donated his work to the Society. A picture of the medal is shown on page 410.

The design was approved unanimously by the Board of Governors, precision dies made by the Metal Arts Company, Rochester, N. Y., and the first gold medal struck in the year 1935 which, on recommendation of the Progress Award Committee, was awarded to Dr. E. C. Wente of the Bell Telephone Laboratories.

The design of the medal is uniquely symbolic of progress in the cinema. On the obverse side, the center is a replica of the official emblem of the Society. Above and around the emblem are embossed the words "For Progress," and below are two laurel branches, Grecian symbols of achievement. A reproduction of film perforations forms a decorative motif surrounding the central portion of the design. Eleven concave panels fill the remaining area extending to the outer edge of the face, upon each of which the form of a bird in flight is embossed. Various movements of the flight are depicted, reproducing the work of E. Marey, a French scientist who, in 1886, designed a "photographic gun," using circular glass plates, for analyzing the movements of living things. Although it was not Marey's intention to reproduce motion, his plates embodied the essential elements of the motion picture and the representation of them is therefore symbolic of the early development of motion pictures.

On the reverse side, the central portion consists of a series of horizontal oblong panels arranged in a partial pyramidal form and bearing the embossed inscription "Awarded to (Name of Medalist) for Outstanding Achievement in Motion Picture

Technology." Crystals of silver bromide, the light-sensitive salt used in most photographic emulsions, are reproduced in two of the panels. Below the inscription is engraved the year of the award. Above it is a small rectangular panel upon which is engraved a sensitometric curve, representing the classical researches of Hurter and Driffield, who laid down much of the fundamental theory regarding numerical specification of photographic emulsion characteristics. Sine waves, symbolic of sound and light, are embossed upon two curved panels to the left and right of the central pyramid. In a slightly inclined panel surrounding almost the entire outer edge, the name of the Society appears in embossed letters.

Current Literature

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

PROBLEMS IN PHOTOGRAPHIC REPRODUCTION, IN PARTICULAR OF SOUND FILMS

BY C. J. DIPPEL AND K. J. KEUNING

The resolving power of a film made by the usual photographic methods is limited by the circle of diffusion formed by the grains of the film. Consequently in order to get sharp pictures on the projection screen the images on the film must be of a certain minimum size. If the film carries a sound track and the speed of the projected film is fixed, then, in spite of a so-called cancellation method being applied when recording and copying, this limited resolving power results in a loss in the amplitude of high frequencies. In order to counteract the circle of diffusion it is desirable that the film should have a high gamma, of say 4 or 5. For picture reproduction, however, Goldberg's rule prescribes a gamma in the neighborhood of 1 or 2. The compromise that has to be reached when a picture film and a sound track have to be copied on a single film by the usual methods makes its influence felt throughout the whole of the present-day technique of cinematography.

A much simpler and less expensive solution of the problem of copying sound films is offered by a new method of photographic reproduction that was developed in the Philips laboratories during the war. This method is based on the use of a diazonium compound combined with a mercury salt. The most striking features of this method are the extremely high resolving power (1000 lines per millimeter) and the locally variable gamma (between, e. g., 1 and 8). A more detailed description of this method and its possibilities of application will be given in another article to be published in this journal shortly. (*From Volume 9, Number 3*)