

REPORT OF THE PAPERS COMMITTEE*

Summary.—The plan of work followed by the Papers Committee during the past couple of years is discussed, together with the results achieved by following the plan. The Report concludes with regulations of the Society with regard to the preparation of papers for presentation and publication, and detailed instructions concerning editorial style and typographical arrangement.

The functions of the Papers Committee are two-fold: (1) to arrange and supervise an appropriate program of papers for our semi-annual meetings; (2) to secure an adequate number of papers to fill twelve issues of our JOURNAL during each year. Nearly 1400 members depend upon the Committee for the latter function; about 250 for the former.

There were 96 papers and 13 reports published in the JOURNAL during 1937. Out of this total of 109, only 8 were submitted directly to the Editorial Board for publication; 5 were reprinted from other publications, and 1 was read before a Local Section meeting. These 14 papers represent less than 13 per cent of the total, and should impress upon us the importance of having an adequate number of papers at each semi-annual meeting to provide material for six issues of the JOURNAL. It indicates also that the majority of our membership are stimulated primarily to write papers when they plan to attend Conventions and not at other times.

Two years ago, a plan was suggested by this Committee for the organization of its work. It consisted of the following steps: (1) publication of a request for papers in each issue of the JOURNAL for four months before the meeting, offering preferred positions on the program, with ample time for presentation and discussion, to those who turn in their manuscripts six weeks before the meeting; (2) personal solicitation of papers by members of the Committee; (3) publication of abstracts in the issue of the JOURNAL appearing immediately before the meeting; (4) request for manuscript copies 10 days before the meeting. It has, in addition, been customary to circulate a Tentative Program about 3 weeks before the meeting as well

* Presented at the Spring, 1938, Meeting at Washington, D. C.; received May 25, 1938.

as to publish this Program in the number of the JOURNAL immediately preceding the meeting.

This plan has proved quite effective, as shown by the quality and number of papers presented at the last four meetings. Much work is necessary, however, to secure abstracts and manuscripts on time, but authors appear to have become more appreciative of the requirements and are making greater efforts to comply with the regulations. Some lack of understanding of the meaning of the term *abstract* has been found among a few authors; others have said that it was unfair to request manuscript delivery before the meeting.

An "abstract" may be defined as a *digest* of a paper, which states in clear, concise sentences the significant material discussed in the paper. Examples of good abstracts are included in the Special Bulletin of this Committee, supplementing this report. This Bulletin was drawn up two years ago and has been revised from time to time. It contains a summary of the administrative practices of the Society regarding acceptance and preparation and oral delivery of manuscripts. It has been distributed to the majority of authors during the past two years and has proved of service to the authors as well as the editorial office. Several papers are received for each meeting, however, that do not comply with our regulations, and it is evident that the authors have not read or, perhaps, have not been aware, of the regulations, especially those related to bibliography and footnote style, illustrations, and drawings. It is suggested, therefore, that wider distribution should be made of this Bulletin by publishing it in the JOURNAL as a supplement to this report. Reprints could then be obtained for circulation to authors who are not members of the Society.

It has been customary to print the Preliminary Program both in the JOURNAL issued before the meeting and in leaflet form for distribution to all members and authors. A final, corrected program is also printed in the JOURNAL a month after the meeting. It seemed an unnecessary duplication to distribute the Preliminary Program twice, and with the approval of the Board of Governors, the Preliminary Program was omitted from the April, 1938, issue of the JOURNAL. Abstracts have been published, however, to facilitate discussion at the meeting and to provide a source of reference until the paper has been published.

It is important that the Papers Committee should cooperate closely with the Publicity Committee, especially during the period just prior to and during the semi-annual meetings. Copies of all abstracts of

papers are turned over to the Publicity Committee several weeks before the meeting, as well as details concerning special demonstrations or prominent speakers on our programs.

Two years ago we began the practice of supplying the Chairman of the Publicity Committee with a copy of all available manuscripts for his use during the period of the Convention. This plan proved very effective, but imposed a handicap upon the Committee because it had been customary to obtain only one copy of each author's manuscript, and occasionally it was necessary for both Committee Chairmen to refer to a manuscript simultaneously.

Accordingly, it was decided that our request for manuscripts before the meeting should specify two copies so that the Publicity Committee could have the exclusive use of one set. It is always possible, of course, for an author to make the reservation, when turning in his copies, that further corrections may be necessary on the manuscript and that the Committee is not to release the copy submitted, for publication in the JOURNAL, until these corrections are supplied. If the manuscript is essentially correct (even though some or all of the figures may be missing), it is usually satisfactory for publicity purposes.

A request for a finished manuscript 10 days before the meeting is not believed to be too severe, and past experience has shown that the majority of authors are able to meet these requirements satisfactorily.

It may be of interest, in conclusion, to present a rough classification of the information that has been presented to the membership at our last four meetings. Your comments and suggestions are requested. The number and type of papers may be divided broadly as follows:

| | | | |
|------------------------------|------|------------|------|
| Acoustics | 4 | Optics | } 34 |
| Apparatus | 28 | Lighting | |
| Color | 9 | Projection | } 30 |
| Education | } 11 | Sound | |
| Historical | | } 6 | |
| Industrial | | | |
| General Engineering Practice | 8 | Television | 3 |
| Laboratory | } 28 | | |
| Photographic | | | |

This summary indicates that emphasis has been placed about equally on papers dealing with apparatus, laboratory and photographic problems, optics, lighting, and projection. The papers on sound have dealt with many aspects of this subject, and the total

number of papers in the class is about the same as the total in each of the other classes. These figures show that no single subject of these fundamental classes has been emphasized at our meetings to the exclusion of others.

The usual effort has been made to obtain papers for the 1938 spring meeting. The results have been most encouraging. Approximately 69 papers have been offered and only 3 were withdrawn. There are 15 papers scheduled on the program, the authors of which will not be present. These will be restricted to 10 minutes or may be read by title if time is limited. There are 15 papers dealing with apparatus and these are limited to 10 minutes for presentation. A total of 36 papers remain, therefore, for which a longer reading time has been allowed.

It is particularly gratifying to note the number of papers on the program by technicians on the West Coast, and the Committee wishes to acknowledge the excellent coöperation shown by the Research Council of the Academy of Motion Picture Arts & Sciences in connection with the preparation of the program.

The generous response to our request for papers indicates that we may yet achieve the goal of every technical society—a *selected* papers program and a large enough volume of paper material to permit the editorial board to publish a *selected* group of high-quality papers in each number of our JOURNAL.

G. E. MATTHEWS, *Chairman*

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| L. N. BUSCH | E. W. KELLOGG | P. R. VON SCHROTT |
| A. A. COOK | R. F. MITCHELL | C. K. WILSON |
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(*West Coast*)

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Supplement

REGULATIONS OF THE SOCIETY OF MOTION PICTURE ENGINEERS RELATED TO THE PREPARATION OF PAPERS FOR PRESENTATION AND PUBLICATION

This bulletin contains details regarding the preparation of material for papers, both for presentation and for publication, and also includes information on the Administrative Practices of this Society relative to the responsibility it assumes regarding the acceptance of papers for publication. Please read the information carefully.

Sect. 8, Div. 4 Administrative Practices reads as follows:

Instructions to Authors.—Papers may be submitted for presentation at the Semi-Annual Conventions, for publication in the JOURNAL of the Society without presentation at Conventions, or for presentation at Local Section meetings.

Papers will not be accepted for presentation at Semi-Annual Conventions unless their quality is regarded by the Board of Editors to be such as to merit publication. In many cases, however, it is impossible for the authors to submit manuscripts sufficiently in advance of a Semi-Annual Convention to permit careful examination by the Board of Editors. The Board of Editors, therefore, shall reserve the right to decline to publish any paper not submitted at least one month prior to a Semi-Annual Convention and approved, even though it be accepted by the Papers Committee of the Society and presented at a Semi-Annual Convention. Papers presented at Local Section meetings are subject to these same regulations.

Papers accepted for publication but not presented at Conventions or other Society meetings will be published as early as possible, but do not have priority over those already in the hands of the Editorial Staff.

The subject matter of papers should be such as to be of interest to the motion picture engineer, the term "engineer" being regarded in a very broad sense as "anyone who contributes to the building of the motion picture."

Prior Right of Publication.—Papers presented at Conventions or other meetings of the Society or submitted only for publication in the JOURNAL shall be regarded as the confidential property of the Society unless withdrawn by the author, and shall not be published elsewhere (except upon the approval of the Editorial Vice-President) until they have either been published in the JOURNAL or have been returned to the author. Prior publication to the extent of 30 per cent of the verbal length of any paper, with due acknowledgment of the source, is permitted.

Right to Reprint.—After its date of appearance in the JOURNAL, an article may be published in other publications provided complete credit is given to the JOURNAL of the Society of Motion Picture Engineers and to the author of the article in question. The citation should appear preferably after the title of the article or as a footnote to the article on the first page and should read as follows: *Reprinted from Journal of the Society of Motion Picture Engineers, Volume, Page, Month, Year.*

Prior Publicity of Convention Papers.—Publicity incident to the presentation of papers at conventions is the responsibility of the Papers and Publicity Committees of the Society and should not be undertaken by the authors or their representatives, except in collaboration with these Committees.

An abstract or abridgment for publicity purposes about 200 words long should be supplied about six weeks before the meeting at which the paper is to be read. Examples of satisfactory abstracts are the following:

"High-Speed Motion Picture Photography Applied to Design of Telephone Apparatus"; W. Herriott, *Bell Telephone Laboratories, Inc.*, New York, N. Y.

High-speed motion pictures are employed at Bell Telephone Laboratories as a visual aid in the study of problems associated with the design, manufacture, and testing of telephone apparatus. A new high-speed camera of the optical compensator type operating at 4000 pictures per second is described, and its application to the study of problems associated with telephone apparatus is discussed.

"A Modern Motion Picture Laboratory"; C. L. Lootens, *Republic Productions, Inc.*, North Hollywood, Calif.

A complete description of the new laboratory of the Consolidated Film Industries, Inc., which was completed during the winter 1936-37. Included are layouts and pictures of equipment in the basement, first, and second floors. The description of the laboratory and equipment follows the sequence of operation of negative development, "dailies," master and release printing, together with a description of the special printers, processing units, chemical system, silver recovery system, and other mechanical items of interest.

"Reduction of Loop-Length Variations in Non-Slip Printers"; E. W. Kellogg, *RCA Manufacturing Co., Inc.*, Camden, N. J.

Compensation for varying degrees of film shrinkage is accomplished in the Bedford non-slip printer by changes in the length of a loop of film between a sprocket and the printing point. This involves uncertainty of synchronism by the amount that the loop, as first threaded, differs in length from the final running loop. For most purposes, the present designs do not cause more change in loop-length than may readily be tolerated.

For certain purposes, especially if this type of printer is to be employed for 16-mm. films, there may be too much departure for synchronism. A guide-roller arrangement is described by which the necessary change of angle of approach of the raw stock to the printing point is attained with comparatively small change in loop-length.

Several possible arrangements are considered and some other features of the non-slip printer are discussed.

Order of Publication.—The order of publication of material presented at conventions or submitted only for publication in the JOURNAL is at the discretion of the Board of Editors and is determined in general by the chronological order in which the papers are received, the timeliness of the material, the technical quality of the papers, and their editorial completeness. The Board of Editors will give due and proper consideration to requests for special and early publication.

The Complete Manuscript.—The complete manuscript, from the editorial point of view, consists of the following items:

- (a) Title.
- (b) Name of author.
- (c) Company affiliation (as a footnote on the first page).
- (d) Summary of paper (not to exceed 500 words).
- (e) The paper proper.
- (f) A complete list of references or citations.
- (g) A complete set of illustrations suitable for making engravings, with a caption for each illustration.

Text.—Papers should be typewritten, double spaced, upon only one side of the paper. It is desirable to send for publication the original (ribbon copy)—a carbon copy is easily erased and may become illegible.

Illustrations.—Each drawing or photograph should occupy a separate sheet and be capable of good reproduction. Blueprints, photostats, or sepia prints will not be accepted. Tracings or line-drawings should be made with black india ink

upon white paper or tracing cloth. Closely spaced coordinate lines on curves should be avoided.

The minimum amount of reading matter should be included upon the illustrations. Necessary information can better be set in type in the caption accompanying the illustration.

The maximum width of a JOURNAL cut is 4 inches and the maximum height is $6\frac{1}{4}$ inches. Illustrations or drawings should preferably be larger and not smaller than these size requirements. It is important that the necessary reduction of an illustration will not make the height of letters contained in reading matter on the

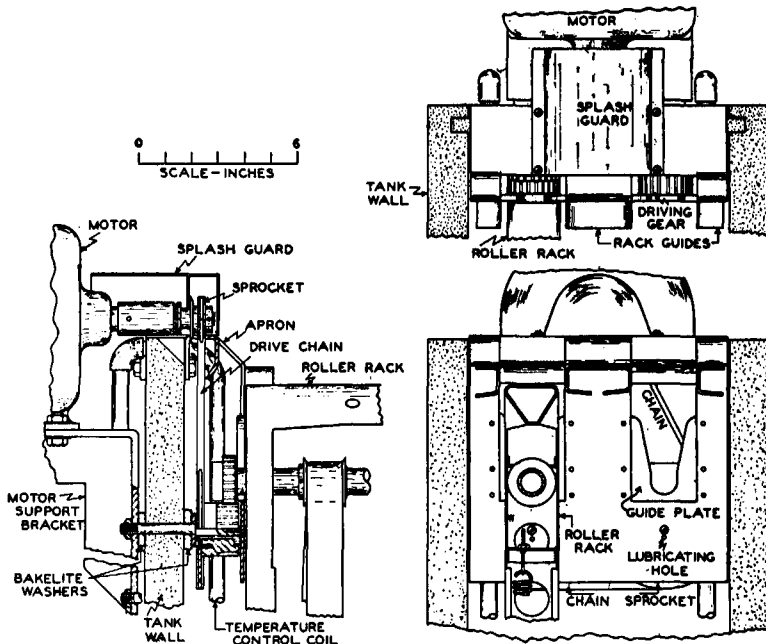


FIG. 1. Good example of a drawing.

illustration less than $\frac{1}{32}$ inch. All inscriptions on graphs or illustrations should be lettered and *not* typewritten.

When preparing illustrations, the style of lettering should be so chosen and the lettering so placed upon the illustrations as to be easily read when projected as lantern-slides before an audience of several hundred persons. Slides are usually reproduced about ten or more feet wide, and should be readable at a distance of fifty feet. Examples of satisfactory illustrations are shown in Figs. 1 and 2.

Listing Captions.—Captions for figures and tables should be listed upon separate sheets accompanying the manuscript.

Address.—It is important that the author's business affiliation and mailing address be written upon the first page of the manuscript.

PRINTING STYLE (HEADINGS)

The value and clarity of a paper are undoubtedly increased by dividing it into sections. The author can assist the editorial office by specifying the type of heading or sub-heading desired in each instance. The headings conforming to JOURNAL style, in descending order of importance, are as follows.

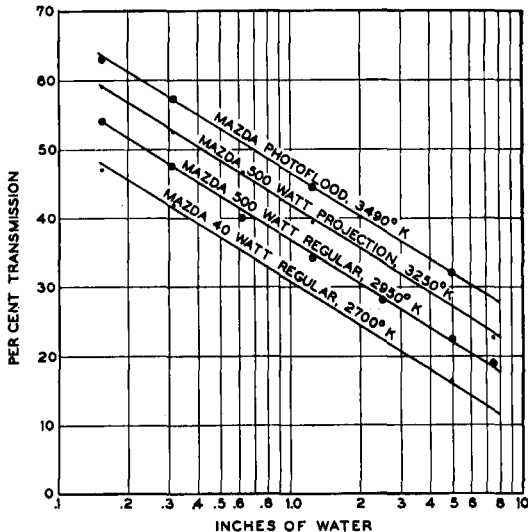


FIG. 2. Good example of a graph.

CENTERHEAD

Italic Centerhead

Italic Sidehead.—These sideheads are run into the text of the paragraph.

BIBLIOGRAPHY AND FOOTNOTES

References to literature should be accurate and complete. References to periodical literature should contain the following items in the given order:

- (1) The reference number, corresponding to the number in the text.
- (2) The name of the author of the paper; correctly spelled and with initials.
- (3) The name of the article, in quotation marks.
- (4) The name of the periodical (unless the periodical is well known its title should not be abbreviated).
- (5) The volume number.
- (6) The date, month, and year, in parentheses.

- (7) The serial number, preceded by the abbreviation "No."
- (8) The page number, preceded by the letter "p."

Example: ¹ McCov, J. L.: "A Light-Intensity Meter," *J. Soc. Mot. Pict. Eng.*, XIV (March, 1930), No. 3, p. 857.

Reference to books should be made as follows:

- (1) Author's name.
- (2) Name of book, in quotation marks.
- (3) Edition.
- (4) Publisher.
- (5) Place of publication.
- (6) Date of publication, in parentheses.
- (7) Page, preceded by letter "p."

Example: FRANKLIN, H. B.: "Sound Motion Pictures." 1st Ed. *Doubleday, Doran & Co.*, Garden City, L. I., N. Y. (1929), p. 101.

Reprints.—Reprints of articles published in the JOURNAL may be obtained from the Society's headquarters office, Pennsylvania Hotel, New York, N. Y. These reprints are most economically obtainable currently with the publication of the issue of the JOURNAL in which they appear. Prices in the quantity desired may be obtained by communicating with the Society's headquarters office.

REGULATIONS ON DELIVERY OF MANUSCRIPTS PRIOR TO A CONVENTION

(1) Two copies of each manuscript must be delivered to the Chairman of the Papers Committee at least one month before the meeting date in order that the paper be presented at the meeting. Papers arriving less than one month before the meeting date may, at the discretion of the Papers Committee, be scheduled on the program to be read by title or substituted for other papers in the event of cancellations.

(2) Two copies are needed in order that one set may be made available for the Publicity Committee and one for the Papers Committee during the period of the Convention.

(3) Final and complete copies ready for publication are desired. In the event that such are not possible, preliminary copies requiring further slight alterations in text or completion of illustrations (as per regulations regarding preparation for publication) before final release by the author will be accepted. These changes should be made, however, within one week after the meeting.

(4) Authors are urged to study carefully the regulations on the preparation of illustrations, and to give consideration to the legibility of the figures (1) as lantern-slides when the paper is read at the meeting, and (2) as printed cuts in the JOURNAL.

SUGGESTIONS ON PAPER PRESENTATION AT THE CONVENTION

The attention of all authors is directed especially to the following suggestions regarding oral delivery of their papers at Conventions. Valuable time of the delegates and other authors will be conserved if each author on the program follows these suggestions:

(1) *Arrangement of Material.*—Manuscripts prepared for publication are seldom suitable for oral presentation. The paper should convey clearly to the hearer: (a) the purpose of the work; (b) the experimental method; (c) the results obtained; and (d) conclusions. The nature of the material and the time available for presentation will determine the degree of emphasis to be placed upon each subdivision. The author should make certain by trial against his watch that the essential points can be presented adequately in the time allotted to the paper.

(2) *Statement of Purpose.*—Orient the audience clearly as to the nature and purpose of the work. A lengthy historical review is generally out of place.

(3) *Technic.*—Describe the experimental method employed so as to indicate the principles involved. Omit details of apparatus or procedure unless there is some particularly novel development. Such data may belong in the published paper but will bore your audience.

(4) *Statement of Results.*—Present the results graphically, preferably with diagrams. Lantern-slides are more clearly seen than hand-drawn charts. These slides should be of standard size (3.25×4 inches) and should project clearly on the screen. Lettering should be kept to a minimum, consistent with clarity, and should be of such size that when the illustration is reduced for publication in the JOURNAL, the reduced lettering will not be smaller than $\frac{1}{32}$ inch in height. Usually it is not satisfactory to typewrite legends on drawings, especially if the typewriter type is small. Regardless of who has made the charts or slides, try them from the point of view of the audience before presenting them at the meeting. Do not read tables, a procedure that wastes time and destroys interest, but point out the general trend of the data. Whenever possible, the results of research should be shown by means of motion pictures, for which adequate projection facilities will be available.

(5) *Conclusions.*—Summarize the evidence and discuss the importance of the results or conclusions to the particular field of research involved.

(6) *Manner of Presentation.*—Do not read from a manuscript verbatim, unless the material has been written expressly for oral presentation. Talk directly to your audience in a clear, loud voice. Do not face blackboard or screen while speaking. Articulate distinctly.

(7) *Demonstrations.*—Details of demonstrations should be checked carefully before the opening of the session during which the demonstration is to be given. This will insure a smoother demonstration and avoid using up valuable time during the technical session.

Many exceptions to, and modifications of, the above suggestions will apply in particular instances. Nevertheless, general adherence to the points brought out will go far toward eliminating the valid criticisms that have been aimed at our programs.

Acknowledgment is made to the Society of American Bacteriologists and the American Chemical Society for many of the ideas incorporated in these suggestions.