for the same color, the engineer cannot make the best machine attainable. Standardization of tint will change all this favorably.

Another very fruitful source of investigation is the excessive loss of light in the optical system of our projectors. In no other lighting system are such losses to be found. In searchlight work 60 to 90% efficiency is common, while in motion picture projectors, efficiencies of less than 5% are the rule. I think you will agree with me that this is a promising field of research. The beam of light in our picture machines is only a parallel searchlight beam somewhat more concentrated, and intercepted by a stencil which causes shadows, half-tones and high lights on the screen to produce a picture in monochrome.

Perhaps no other single object has more warrant for intensive study by our Society than this one of light conservation for it has many and rather wide reaching effects. Not only will it have a bearing on education by making this universal printing press available in more remote places than is possible now, but it will materially reduce the fire risk by reduction in the heat attendant on the production of light.

In the arc lamp the light falls off directly as the current, while the heat as the square. Therefore, if the current and therefore the light can be reduced by four the heat will be decreased by sixteen, certainly an object worthy of the attention of any of our engineers.

These are but suggestions, for there are many subjects needing our attention. The laboratory of the producers has not yet given us the membership greatly to be desired in our discussion of problems involving the art where production touches elbows with reproduction.

When all these things have received deserved attention, our work throughout the world will be more and more felt, for it is not with cold reasons that we may judge of the possibilities of our industry when standardized.

The motion picture is a new teacher speaking to every man in his own tongue, including those who cannot read printed characters at all. It is also a new art expression. For centuries we have had the art of form, architecture, sculpture, drawing; the art of sound, music and singing; now we have the art of motion, and its limitless possibilities as an instrument of expression are but just beginning to attract the artist. The industry has brought forth a new type of artist. Let us quickly get a standardized medium for this new artist.

SOCIETY HISTORY

Our Society has now definitely reached the growth where its influence is sought. This enviable state is gratifying to me, personally, as you will see if you will permit me to recount the history of its birth.

Every national organization of the motion picture industry, by whatever name, has had its Committee on Standards. I was first elected to membership on that Committee of the Motion Picture Board of Trade. We met once, then "blewey." I was next elected on a similar Committee of the present National body, and on call made a trip from Washington to New York to find not a single other member or officer present, with the exception of the secretary of this Com-

mittee who was also Secretary of the National Association, in whose office we were supposed to meet. At my insistence he phoned members nearby, but without result. "Blewey" again.

On the way home that afternoon I fidgeted in my chair, fussed over conditions which made for such fruitless efforts, and determined I would put my personal standing in the industry to the risky test of inviting engineers to come to Washington for the purpose of organizing a Society of Motion Picture Engineers, on my own responsibility. I am terrified even now every time I think of the chagrin I would have felt had the call gone unacknowledged.

But a most gratifying response rewarded my anxious wait on the fateful day, for Mr. Don J. Bell came down from Chicago, Messrs. Willett and Westcott from Boston; Cromelin, Cannock, Gillett and Miles from New York. These gentlemen with Mr. Brockett and myself formed a very substantial nucleus indeed. We adopted a constitution and by-laws, and adjourned to meet in New York in October after incorporation should be completed.

And right here was where our little bark first struck rough water. Twenty-four hours before this New York meeting our Secretary sent out unauthorized notices that the meeting was adjourned three months to meet in Atlantic City. Happily this calamity was averted when a considerable number of telegrams, hastily dispatched, collected a very substantial gathering, and permanent officers and directors were elected. This was indeed a critical time. I remember that a gentleman met me in the lobby when the future of the Society was trembling in the balance, and introducing himself, said he came from Pittsburgh with another gentleman both of whom would like to join the Society if it was going to amount to anything. I told him it was going to amount to a-plenty even if I had to knock down and drag out all obstructionists. These two gentlemen, Mr. Wible and Mr. Campe, have proved stalwart workers, and have added materially indeed to the stability of our organization, as you all know.

Our next meeting, Atlantic City, marked the beginning of our real purpose—namely, the dissemination of specialized data relating to our art; and the next meeting held in Chicago, added a set of unanimously-adopted standards. This data and these standards have already been in considerable and growing demand. Each copy of our Transactions is valuable, but I think all of us will agree that our last printed volume is not only a very valuable publication but one of the finest pieces of printed matter ever publicly distributed.

Our Society is now a well-knit body, and certainly the time has come when much of the arduous work which necessarily during the heading months of such a body devolved upon the office of the President, can to advantage be delegated, as is demonstrated by the excellent work of the Papers Committee.

If you will permit me to speak from this experience as your Presiding Officer I should like to make a few recommendations, two at least, that I think worthy to be adopted at once. First, that the officers who pass on expense vouchers and sign checks therefor, whether the treasurer and president, or a vice-president, should, for convenience and efficiency, reside in the same city. Second, that to the duties of the

Papers Committee be added responsibility of the publication of the Transactions, certainly so after the work now in hand is completed and out of the way.

As I said at the Rochester meeting, I am not a candidate for a third Presidential term. But before relinquishing my opportunity to speak from the chair, I should like to confess to two errors of personal judgment. The first was the effort to prepare at the request of the Federal Government, a camera specification for war work, in conjunction with Don Bell and Carl Gregory. It wasn't wholly a success because these camera authorities couldn't agree. This should have been a warning to me that the request of the Underwriters Laboratories that we adopt an alleged ideal specification for a projecting machine was unlikely of approval by makers of diverse models, which was my second mistake.

It did one thing, however, well worth while. It clarified the atmosphere and made more distinct to me and perhaps to others of us, the objects for which this Society was organized and even more strikingly the things for which it is *not* organized.

For example, the Society of Motion Picture Engineers is not a judicial body to settle controversies between conflicting interests or to promulgate recommendations which make for class-discrimination. If our Society ever degenerates into a contest between factions each trying to use the Society for personal advantage, then our usefulness is ended and our organization will soon break up as others in the motion picture industry have already done.

What we *did* organize for was to set our official seal on standards generally recognized as standards; and second, and perhaps best of all, to put into permanent form for world-wide distribution, the specialized knowledge which our members, experts in their particular line, are so unselfishly furnishing for this purpose. And while the official stamping of generally acknowledged standards is a necessary duty, for myself I have found the most interest in our meetings has come from the valuable papers read and printed, and I don't believe the limited time of our meetings can be spent in a more worth-while manner.

And it is by the printed copies of these papers that we shall be remembered, for they will doubtless find their way not only into the hands of our members and others of our own industry but into libraries generally. Perhaps nothing is more to be desired or would add more to our prestige or usefulness.

And there is a wonderful collection of data already collated. Do you want to know the percentage of loss of light by reason of the tinting of films—it is in the Transactions. Do you want to know the distortion error due to angular projection—it is in the book! Do you want to know the source of loss of light at various points in the optical system—it is in your own printed copy. Do you want to know the cause of the stroboscopic effect of shutters—it is in the booklet sent our members. Do you want to know the proper current density for carbon arcs—reach for the bound volume. Do you want to know the advantages and disadvantages of various electric current devices—it is in the unselfish report of that Committee.

Gentlemen, I thank you for hearing me through, I have a fatherly feeling for this Society.

C. FRANCIS JENKINS.