been considered and the possibility of using the steel work of buildings for a return circuit has been studied. The committee expressied a desire for discussion upon the following question: Is it the desire of the Association that this committee prepare specification covering welding equipment or shall the Association adopt specifications now existing as used by the National Electrical Manufacturers Association?

Discussion: Mr. Billau pointed out that since rail-roads were only one of the users of welding equipment general specifications for such equipment might tend to confuse rather than to clarify the issue. J. R. Sloan, Chief Electrician, Pennsylvania Railroad, suggested that it would be better to take specifications already in use and change such points as might be objected to rather than to write new specifications.

Illumination

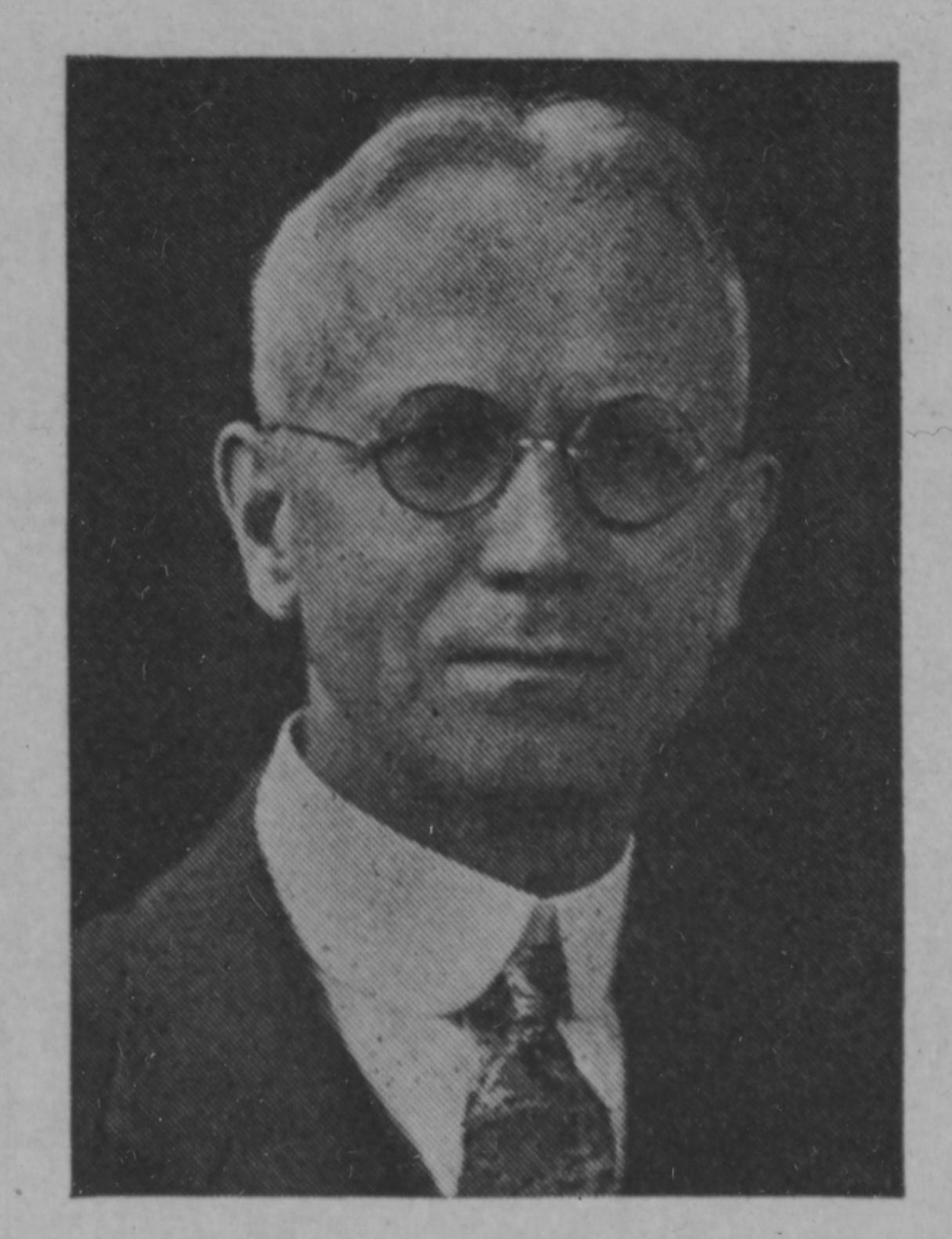
Mr. Billau, chairman of the committee on illumination briefly outlined the subjects which will appear in the annual report. Among these are a revision of standard incandescent lamp schedules and a revision of specification for incandescent lamps with a view of putting the specification in form for final adoption by the association. Floodlighting as applied to railroad yards was designated as a subject to be continued and the feasibility of using a series system of power supply distribution for floodlighting will be studied.

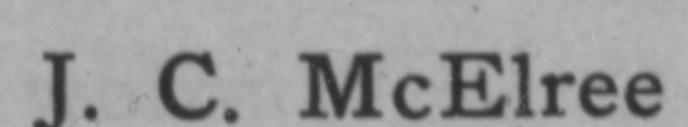
The committee also proposes to investigate the feasibility of using pre-focus lamps for locomotive headlights. It was stated that the development of this type of lamp is entirely practical but that its successful use depends upon the development of a receptacle which can be satisfactorily and easily substituted for the present standard receptacle. The development of a practical method for mounting locomotive headlights using this type of lamp so that it may be readily adjusted to throw the beam parallel with the track and the need for the lamp itself, owing to its probable higher cost, were phases of the subject which the committee felt should first be developed by the committee on Locomotive Electrical Equipment.

Discussion: E. W. Jansen, electrical engineer, Illinois Central, mentioned the satisfactory service which he had had with a new type of headlight lamp. The new lamp known as the C-4 is a 250-watt lamp. Some of them, Mr. Jansen said, he had in service for 90 days. R. W. Cost of the Westinghouse Lamp Company, in speaking of this lamp, said that it was still in the experimental stage and that it had been developed in an effort to improve the present type of headlight lamp. He also said the only way the lamp companies could find out how satisfactory this lamp was, was to get the reactions from those who used them, and that sometimes the first reports were not conclusive.

Automotive Railway Equipment

In view of relatively recent development in automotive railway equipment, the committee on this subject felt that the adoption of standardization of automotive equipment should be held in abeyance for at least another year and requested discussion on roller bearings versus friction bearings, battery ignition versus high tension magnetos and the advisability of the committee delving into engine construction details. Opinions were requested on the subjects of maintenance of gas- and oil-electric motor cars. Three different types of lighting systems were briefly described and it was stated that the sub-committee planned to follow up the operation of these







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and arrive at a conclusion as to which is the best practice.

In the absence of E. F. Weber, supervisor automotive service, Chicago, Burlington and Quincy, and chairman of the committee, the report was presented by J. E. Kilker, shop production engineer, Missouri Pacific.

Discussion. Mr. Billau said that since this subject was receiving more and more attention from the Motor Transport Division of the A. R. A., it would be well to find out which branches of the subject would come under the jurisdiction of the A. R. A. in order to avoid overlapping. Mr. McElree said that the question of bearings would probably be one problem to be handled by A. R. A. committees.

Radio

Geo. W. Bebout, electrical engineer, Chesapeake & Ohio, and chairman of the committee on the application of radio to railroad service presented the report on this radio for railway service. He outlined the situation regarding the use of radio communication for freight trains and hump yard service All work of this nature has been held up by the Federal Radio Commission. Apparently this has been due to the fear that such applications to railroad equipment would interfere with police radio. Nevertheless application blanks have been prepared by the Commission for the use of the railroads, and while the Commission could not promise anything, the submitting of these blanks was taken by the committee as an indication the Commission would look more favorably upon the application of the railroads for this service.

Discussion: The question of departmental jurisdiction regarding radio equipment was raised by Mr. Hill. Mr. Andreucetti cited the instance of the Chicago &



E. F. Weber



G. W. Bebout