mittee of five members shall be appointed by the committee on car service. Three members of the arbitration committee shall be a quorum.

In case any question or dispute arises under these rules between members of the Association it may be submitted to the arbitration committee through the Secretary of the Association in abstract. The abstracts shall briefly set forth the points at issue and each party's interpretation of the rules upon which its claim s based. The arbitration committee shall base its decision upon the rules and the abstract submitted, and its decision shall be final. Should one of the parties refuse to furnish the necessary information the arbitration committee shall use its judgment as to whether it can properly decide. All decisions shall be reported to the Association through the committee on car service.

In case a question shall arise not covered by the rules, the roads disagreeing may by mutual consent submit such questions to the arbitration committee.

The committee on car service may appoint secretary for the arbitration committee, who shall be paid by the Association. The other penses of the arbitration committee shall be divided equally between each of the parties to the dispute and the Association. The expenses shall be first paid by the Association and then billed to the parties concerned by the treasurer of the Association.

The following question was put to the railroads by means of a circular:

"Are you disposed to favor changing the Present mileage basis of settlement for car Service to a per diem basis, provided a practical per diem system can be devised?

Replies received from 133 roads, with 155 memberships, operating 152,653 miles of road and owning and controlling 1,257,031 freight This is 64.3% of the total membership and 77% of the mileage operated. One hundred dred and eleven members, owning and controlling 1,085,824 freight cars and operating 128 557 miles of road, are in favor of per diem. Fifteen members, owning and controlling 87,-464 freight cars and operating 12,949 miles of road, are not in favor of per diem. Twentynine members, owning and controlling 83,743 reight cars and operating 11,147 miles of road, express no opinion.

COMPARISON OF REPLIES,

On basis of membership replying:
Fave casis of membership replying:
Rayons per diem
E ^{PPOsed} to per diem
Ornors per diem
On basis of cars owned by roads replying:
Un. Per diem86.3%
Reposed to per diem
Press no opinion
On basis of miles operated by roads reply-
Pavor per diem
Reposed to per diem 8 5%
Prosed to per diem 8.5% Press no opinion 7.3% Railway and Engineering Review.
Railway and Engineering Review.
- J Engineering Neview.

Standard Dimensions of Box Cars.

At the spring meeting of the American Rail way Association held April 23 and 24 in New York, the following report of a committee was adopted :-

In accordance with the resolution adopted the Association, Oct. 23, 1901, the Master Car Builders' Association has been requested to Builders' Association has been required external dimensions for the standard box car, based upon the interior dimensions, as prescribed by the

Association.
Your committee has been informed that a committee has been informed that sided upon such outside dimensions, and that they have been submitted by them to the difterent railroads. It is understood by your

committee that the dimensions suggested are acceptable to the railroads, and that at the Iune session of the M.C.B. Association, they will, no doubt, be adopted.

A question has been raised as to the necessity of the adoption of a door opening of 6 ft. in width. It seems advisable that the Association should be informed as to the reasons which actuated the committee in recommending and the Association in adopting that width. In this connection the committee desires to state that in considering a standard box car it was thought best to increase the width of the side door opening to 6 ft. for convenience in loading. The ` adoption of a standard car would naturally prohibit the building of more furniture cars, and it was found on investigation that, in order to facilitate the handling of a large number of bulky articles, for which furniture cars are now provided, it would be a convenience, and in some cases an actual necessity, to increase the width of the car door opening to at least 6 The standard box car takes the place of the present box and furniture cars of different sizes, and as soon as these cars become obsolete by deterioration or otherwise, to enable all classes of commodities to be taken care of by the standard car it will be necessary that the car be made to suit all which are provided for in the classification as near as it is possible to do so. It seems, if the present construction of the frame of the car is not sufficiently strong to admit of such an opening, its strength should be increased.

It will be a source of gratification to the Association to learn that at South Bend, Ind., where a large percentage of shipments of light and bulky articles originates, and where the number of cars over 36 ft. in length ordered by shippers during a period previous to the adoption by the official Classification Committee of the scale of minimums as recommended by the Association, was from 70 to 92% of all cars ordered for such shipments, the proportion has decreased since the adoption of that scale to about 46%. The results at this point were attained when the recommendations of the Association were only in effect in the official classification territory. Undoubtedly, when the recommendations of the Association are generally adopted, the results will be even more pronounced.

It has been brought to the attention of the committee that some perplexity exists in the application of the recommendations of the Association as to the increasing and decreasing minimums owing to fractional lengths of freight cars now in service, and as it is wise to allow some latitude in the standard car minimums, as affected by the length, the committee therefore recommends the adoption of the following resolution:

Resolved, that 6 inches above any given length shall be rated as even length in feet of whatever length it may approximate. Lengths of over 6 inches shall take the minimum of the next greater length; thus, a length of 38 ft, 6 ins. shall be rated as a 38-ft. car; one of a fraction over 38 ft. 6 ins as a 39-ft. car.

Your committee has examined the question

as to the classification committees and herewith reports the results of its investigations:

The official Classification Committee has adopted the recommendations of the Association in the increasing minimums for cars over 36 ft. in length, but has considered it unnecessary to make any decreased minimums for cars under 36 ft. in length.

Your committee has information that the failure to provide the decreased minimums for cars under 36 ft. in length in the official classification territory is working a hardship to railroads owning a large number of 34-ft. cars, and is inclined to believe that unless decreased minimums are made to apply to cars of that length, it will interfere with the general adoption of the standard box car.

The Western Classification Committee has

adopted for cars over 36 ft. in length increasing minimums of 3% per foot instead of the figures recommended by this Association, which are based upon the actual increase in the capacity, approximating 7½% per foot; and for cars under 36 ft. in length has reduced the minimums at the rate of 3% per foot instead of at the rate of 2½% per foot for 35-ft. cars, and 5% for cars 34 ft. or under, as recommended in the resolution of this Association.

The Southern Classification Committee advises through its chairman that the increase in minimums recommended by the Association will be adopted by that committee.

While we have no authoritative word from the Canadian Freight Association, we are informed that the Canadian railroads are likely to order cars of the dimensions recommended by the Association for all their new equipment.

Your committee greatly deprecates any departure in any particular from the recommendations adopted by this Association on Oct. 23, 1901. It is necessary, in order that the best results should be attained, that all the different classification committees should pursue the same course in reference to the standard box car. Without such uniform action, difficulties and differences are sure to arise which will increase as time goes on, and greatly interfere both with the object desired to be attained by this Association and with that harmony of action which is essential to its successful issue. For this reason your committee offers for the consideration of the Association and recommends for adoption the following resolution:

Resolved, That the Association considers it of great importance that all classification committees should adjust their scale of increasing and decreasing minimums to the scale recommended by this Association, and requests the Western Classification Committee to reconsider its schedule, and readjust its classification recently adopted.

It is the purpose of the committee to carefully watch the effect of the adoption of these new minimums in the other classification territories, and to report the results of its observations at the next meeting of the Association.

G.T.R. SEMI-ANNUAL MEETING.

The report presented at the semi-annual meeting in London, Eng., April 10, was published in our last issue. The President, Sir C. Rivers Wilson, in moving the adoption of the report and statement of accounts, said: "The half-year has been uneventful but prosperous. The volume of business has increased, more freight have been hauled, a larger number of passengers has been carried, our revenue has considerably increased, and our officers have continued their work of improvement on the lines throughout your system.' Proceeding to examine the accounts in detail, he showed that while there had been 199,465 more tons of freight and live stock carried than in the corresponding half-year, there had been a decrease of £3,761 in the income, owing to the average rate per ton having fallen from 5s. 10 1/4 d. to 5s. 7 1/2 d. The passenger income showed an increase of £130,425, brought about by an increase of 510,881 in the total number carried, and of 2d. in the average fare. The total gain in the receipts was £134,063. Of the increase in expenditure, £111,627, he showed that the extra cost of maintaining the permanent way was £44,429, of which the most important item was an increase of £25,688 in the repairs and renewals of bridges, £10,000 representing the increased amount credited to bridges renewals account, and the remainder being due to the expenditure on the renewal of certain bridges between Montreal and Toronto. The amount charged to maintenance of equipment showed an increase of £32,536. Owing to the difficulty of obtaining materials, there