

THE CANADIAN ROADMASTERS' ASSOCIATION.

The third annual convention opened in the Temple Building, Toronto, Sep. 20. President W. Shanks, in taking the chair, said: In opening this our third annual convention I may say, before commencing the business, that I am very much disappointed that there are not more of our members with us. I fully expected that at this meeting we would have a goodly number, but there may be more in later on. I think it must be that a great many of our roadmasters really do not appreciate the benefit derived from a meeting of this kind. Perhaps when the good to be obtained from these gatherings becomes better known there will be a larger turnout. I will not attempt to take up any more of your time just now, but will proceed to the business in hand. The first in order would be the reading of the minutes of the last annual meeting, but as they are rather long, perhaps we had better pass that over, & take up the Secretary-Treasurer's report.

The Secretary-Treasurer, J. Drinkwater, reported a membership of 41 in good standing; an expenditure of \$6.42 had been made since Jan. 31st, with receipts amounting to \$8, leaving a balance on hand of \$63.58. The report was adopted.

The Secretary then called the roll as follows. Those before whose name an asterisk is placed were present: A. Black, C.P.R., Pogomasing; *J. R. Brennan, O. & G.R., Ottawa; W. Cooper, C.P.R., Three Rivers; J. Coughlin, C.P.R., White River; *J. Drinkwater, C.P.R., Winchester; A. Gordon, C.P.R., Parkdale; *J. Graham, C.A.R., Ottawa; *Thos. Graham, C.A.R., Parry Sound; F. W. Green, C.P.R., Fort William; J. Henessy, C.P.R., Montreal; *T. Hickey, M.C.R., St. Thomas; *F. J. Holloway, C.P.R., Parkdale; D. Jelly, C.P.R., Nepigon; *J. Jelly, C.P.R., Carleton Junction; H. L. Johnston, C.P.R., Nakusp; M. Keefe, N.Y. & O.R., Ottawa; W. Kelly, C.P.R., Sudbury; Thos. Landers, C.P.R., Farnham; J. Leslie, C.A.R., Ottawa; R. H. Lowe, C.P.R., Regina, N.W.T.; *A. McAuley, C. P. R., Toronto; *A. N. McLennan, S. & L. R., Glace Bay, N.S.; J. Malloy, C.P.R., Smith's Falls; Wm. Moe, C.P.R., Sherbrooke; M. Morin, C.P.R., St. Therese; G. Munroe, C.P.R., Kamloops; *E. Murphy, C.P.R., Woodstock; E. Myers, C.P.R., Smith's Falls; W. O'Donnell, C.P.R., Chapleau; W. Rose, C.P.R., London; Geo. Seamen, I.C.R., Moncton; J. Shanks, C.P.R., Montreal; *R. Shanks, C.P.R., Mattawa; *W. Shanks, C.P.R., Carleton Jct.; J. Telfer, C.P.R., Calgary; W. Wallace, C.P.R., Ottawa; R. Watters, M. & N.W.R., Portage la Prairie; J. Yeo, I.C.R., Riviere du Loup.

The Secretary reported correspondence with a number of railway managers, etc., about the convention, most of whom had replied they would arrange leave of absence & transportation for their roadmasters who wished to attend.

The reports of committees were then taken up.

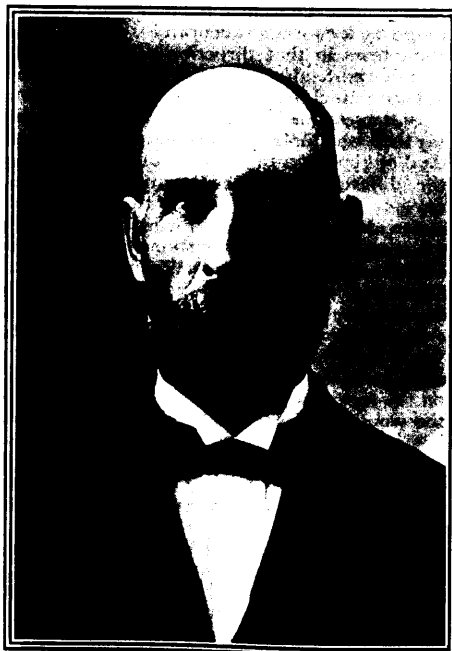
TRACK TOOLS.

The Committee, J. Drinkwater, A. McAuley & W. Shanks, reported as follows:—In our opinion it is economy for any railway company to furnish its trackmen with the best & most suitable tools. They should be so designed as to enable the men using them to accomplish the greatest amount of labor without expending a superfluous amount of energy in so doing, by reason of clumsy or improperly designed tools; & they should be so constructed that the parts which require great strength & are subjected to great strain or wear, should be of a quality of steel best adapted to withstand the same, thereby reducing to a minimum the weight of certain tools where strength & not weight are desired, also decreasing the load trackmen have to carry

about on their work, as well as decreasing expense to the railway companies, as most tools are purchased & sold by the pound. The committee believe that these tools can be best & most cheaply obtained off concerns which make a study of these points in track tools, & which are supplied with the proper facilities to incorporate them in the same.

The adoption of the report having been moved it was discussed as follows:—

T. HICKEY.—I notice that this report states that these tools "can be best & most cheaply obtained off concerns which make a study of these points in track tools, & which are supplied with proper facilities to incorporate them in the same." I agree with the Committee that these concerns can make tools cheaper than we can in our railroad shops. The Roadmasters' Association of America had up the question of tools some seven or eight years ago. I was one of the Committee, which met during the year at Toledo. Every member of the Committee was present & brought some tools with him—each member brought a tool & some more than one—and we got quite an assortment. From those we worked there & designed what we thought



W. SHANKS,

President Canadian Roadmasters' Association, 1897-'99.

was most suitably adapted for the purpose. We got the privilege from one of the companies to use their shop for making & changing the tools, & I think we got up a number of tools that were very good. Clay picks, it was not a very hard matter to decide on that tool, but on the question of a tamping bar, we went into that quite extensively & changed & planned one that we thought was good. Then there were spike mauls & other tools. The most important were the claw bars. It took us some time to design one that we thought was right that is, one that would readily take hold of a spike in a tie & would pull it out without bending. We accomplished the making of a claw bar, & it was adopted as a standard. The M.C.R. is using that particular claw bar to-day, & our foremen are very very well satisfied with it, & it would be a hard matter, I believe, to change it for any other, so far as the foremen are concerned.

The report was adopted.

EXPANSION OF DIFFERENT WEIGHTS OF RAILS.

The committee, J. Shanks, J. Leslie & J. Graham, reported as follows: The expansion

required in 30-ft. rails at different temperatures is as follows:

30° below zero,	5-16 of an inch.
0°	1-4 " "
30° above zero,	3-16 " "
60°	1-8 " "
90°	1-16 " "

The above expansion applies to rails from 56 to 73 lbs. per yard.

T. HICKEY.—This is an important question & one we should not lose sight of. You have all noticed the expansion on different roads, & I have no doubt we have all heard the lamentable sound of the wheels passing over the joint where there is too much expansion. While too much expansion can be given, too little can be given as well. The expansion used by the Michigan Central is as follows:

From 7° degrees above to 30,	5-16 of an inch.
" 30	" 53, 1/4 "
" 53	" 76, 3-16 "
" 76	" 97, 1/8 "
" 97	" 120, no exp'n used

We use iron shims so made that they cannot drop down below the head of the rail—that is, the whole shim cannot drop down—the shim can go down 1 1/4 in. but not entirely. These shims of course would be taken out before the train passes over the rail.

THE CHAIRMAN.—I would like to hear from all the roadmasters on this question; it is a very important one & there is a great deal of difference of opinion in connection with it. Perhaps Mr. Drinkwater has something to say about this.

J. DRINKWATER.—Mr. Hickey said this was a very important question & one that should not be lost sight of. It is something I have given a good deal of thought to & I have been reminded very often of the subject in riding over my own division, & almost every division that I have been over. I forget whether Mr. Hickey said it was a melancholy sound, or what, he heard at the joints—something like that anyway. It is a thing I have never been able to come to any definite conclusion about, as to how much expansion would be right. Mr. Hickey has truly said that we can give too much & we can give too little. The object of allowing for expansion at the rail joints, to my mind, is to provide against the rail kicking out of the road—that is the only reason why there is an opening left at a joint. I have never had charge of any track that I did not think the joints were too open, that there had not been too much allowance for expansion. I have been furnished with a set of shims, yet I find it very difficult to use them & get the expansion just as the blue print lays it down. We start out in the morning at 7 o'clock to go to work, & probably it is 20 above zero, or down to zero. We set up a leg of rail, or put it in the track—generally, changing rails, we set up a leg of rail & use our shims & put on our fish plates, or whatever joint fastening we may use, tighten the bolts fairly well & remove the shims as we go along 7, 8 or 10-rail lengths. The atmosphere goes up, & at 12 o'clock probably it is 90 in the sun, & you walk over that same leg of rail & find about the same opening in those joints as there was at 7 o'clock—the fish plates grip the rail & carry it ahead & you have the same openings. After you have laid 10, 15 or 20 miles of track, & in Nov. or Dec. you find the joints are all too open. That has been my experience. I think it is the most difficult thing trackmen have to contend with. In laying new track the same conditions exist—the ties have nothing to hold them, the resistance of the ties is less than on ballasted track & the whole thing walks bodily ahead as the track is laid. I re-laid a piece 6 years ago in June & I put 4 ft. more rail in 3/4 of a mile than I took out. The foreman said, "That will go over the fence in a week." It has not, those rails are about as good on the ends as when they were put in. I have seen lots of rails used up on the ends—one of the