Long Rails on the M.C.R.

Some time ago we described an experiment with rails of 500 ft. length on the Michigan Central Rd. Experiments in this line began several years ago on sections of track in the suburbs of Detroit, Mich. Thirty-foot rails are butted end to end without any allowance for expansion, and the splices are screwed up very tightly with machine-made bolts. This arrangement provides a practically continuous rail over the 500-ft. section. To provide for expansion and contraction at the ends of these sections specially designed slip joints are used, which carry the wheels over the opening of 2 to 4 ins. without a drop. At Detroit the rails are anchored at the middle of each 500-ft. section by embedding several ties in a foundation of concrete and slot-spiking the joint splices. During the past year experiments in this line have been carried out on a much larger scale, at a point on the Saginaw division of the road, a few miles out of Detroit. A mile of track has been laid with rails tightly spliced together in 500-ft. sections, without allowance for expansion. Slip joints are used between the long sections, as at Detroit, but the method of anchoring in this case is somewhat different. The rail at the middle of each section is anchored to a piece of rail about 15 ft. long set vertically in concrete in a hole excavated into the roadbed. The top of this anchor rail rests against, and projects slightly above, the flange of the track rail, fitting into a notch in the horizontal leg of a splice bar. This experiment, which is being carried out under the supervision of Chief Engineer A. Torrey, will undoubtedly be watched with a good deal of interest.—Railway and Engineering Review.

When Double Track Is Necessary.

J. Oborne, General Superintendent C.P.R., St. John, N.B., writes:—"It is my opinion that a railway should not be double-tracked until the grades and curves have been reduced to the lowest practicable limit, the roadbed is thoroughly ballasted and equipped with from 80 to 100-lb. rails and the limit of weight and capacity of power for economical freight train operation is supplied; and crossing sidings of sufficient length to accommodate two of the longest trains, which sidings should be placed six or seven miles apart and arranged so that they will form part of the second track. The survey for these should be made and determined upon several years before the work of double tracking is begun. Then when the traffic justifies the running of over 18 trains in each direction daily, or one train every 90 minutes, the second track should be put in, especially if the heavy traffic is regular throughout the year, or for a period of over four months."—Railway & Engineering Review.

An agreement has been signed by which the telegraphers engaged on the Michigan Central Ry., Canada Southern Division, from Niagara to Windsor, Ont., have had their minimum rate of wages increased from $40 to $45 a month.

Bell Telephone Co. of Canada.

Following is the annual report for 1901 presented at the annual meeting, Feb. 27:—4,498 subscribers have been added during the year, the sets of instruments now earning rental being 42,858. The Co. now owns and operates 343 exchanges and 514 agencies. 2,843 miles of wire were added to the long distance system in 1901; 1,303 miles in the Ontario department, and 1,540 in the eastern department. The long distance lines owned and operated by the Co. comprise 24,193 miles of wire on 6,634 miles of poles. $550,000 of 5% bonds were sold during the year, the net premium on which, $53,361, has been carried