

rockets and everything necessary to produce flashlights at certain pre-arranged intervals of time which could be observed simultaneously by the observers at the stations for which the difference of longitude was wanted. The results from this method proved very satisfactory.

The renewal of the boundary question arose at the time the Alaska problem was under consideration. The Treaty which arose out of that dispute not only made provision for the delimitation of the Alaska boundary which had not previously been run but for the renewal and permanent demarcation of the lines formerly run from the Atlantic to the Pacific. For the purpose of carrying out this scheme, His Britannic Majesty appointed Dr. W. F. King, C.M.G., Dominion Astronomer, the Commissioner on behalf of the British Empire, and the United States appointed Mr. O. H. Tittmann, Superintendent of the Coast and Geodetic Survey, Commissioner on behalf of the United States. This work has been in progress at different points for several years — carried out by officers under instructions from the Commissioners, the American and Canadian parties often working harmoniously together. The section east of the St. Lawrence forms one of the links in this great chain. The old lines are retraced and opened out to a width of about 30 feet or as wide as necessary for the purpose of having a clear sky line. Along the centre of the line, the brush is cleared away and such logs as would interfere with accurate measurements cut out. The lines are measured with great care where a system of triangulation cannot be carried along as a means of control in determining accurate measurements. The tapes used are *invar* which have been compared with the most reliable standards. The line is prepared for measurement by driving hubs from four to six inches in diameter and rising from three to four feet above the surface of the ground for supports for the ends of the tape. Each hub is braced by three or four braces which are driven into the ground at an angle and nailed to the centre hub near the top which holds it firmly in place. The hubs are set at an exact tape length and a strip of copper or zinc about half an inch wide and