

mentioned, the Imperial Act by which British Columbia and the Hudson Bay territory entered the Dominion, came into force in July, 1871. On that day strong engineering parties were sent out by the Government of Canada to explore the whole region intervening between the seat of Government at Ottawa in the eastern provinces and the Pacific coast at the west. The object was to obtain more complete information respecting the country, and form a line to be followed by a trans-continental railway. The engineering force engaged in this work has been about a thousand men of all grades. The surveys have been continued from 1871 up to the present time. I have been intimately connected with it myself, and therefore it behoves me to refrain from saying much with respect to the manner in which the work has been done. I may, however, be pardoned for alluding to the earnestness and determination of the Government and people of Canada with respect to the development as rapidly as possible of the magnificent country which has come under their control. An instance may be given in connection with the surveys. After three years had been spent by the large staff in exploring every part of a wild, uninhabited, and roadless country, extending a distance of about three thousand miles, a great amount of exact engineering information had been obtained at a heavy cost, when a serious and discouraging disaster occurred. In 1874, in mid-winter, the building in which were deposited the field note-books, the unfinished plans, and nearly all the other information accumulated, was destroyed by fire, and nearly every scrap of paper was consumed; and thus the labour of three years, and results which had been obtained at a cost of about £300,000 sterling were lost. Nothing daunted, the order was given to begin the work of surveying afresh. It has been vigorously prosecuted up to the present time, and now I can point to some of the results as being highly satisfactory.

I shall not attempt to weary you with even an outline of the details of the work which already fills volumes; I will simply allude presently to the general information which has been acquired, and perhaps some of the more important results which have been obtained. It will, however, enable the members of the Institute to form some idea of the labour which has been expended on this survey when I inform them that the total length of explorations made during the last seven years exceeds 47,000 miles, and that no less than 12,000 miles have been laboriously measured by chain and spirit level, yard by yard, through mountain, prairie, and forest. To mention that the Canadian Government has on this special examination alone expended about £700,000 sterling will