

No. 9.

ROYAL SOCIETY, CANADA, TO THE MINISTER OF MARINE.
ON THE STANDARD UNIT OF TIME AND THE HOUR MERIDIAN.

ROYAL SOCIETY OF CANADA, OTTAWA, 1st June, 1891.

SIR,—I have the honour on behalf of the Royal Society of Canada to transmit several papers for the information of the Government, including a report adopted by the Society at its recent general meeting in Montreal, on "the unit measure" and the "hour meridians" in connection with the subject of universal time reckoning, and bearing on the question of the legislation which is required in the Dominion.

I have the honour to be,
G. C. W. HOFFMANN,
Hon. Secretary.

The Hon. C. H. TUPPER, Minister of Marine.

ROYAL SOCIETY OF CANADA.

*Address at the Opening of Section III, by the President, Sandford Fleming,
C.M.G., LL.D., M. Inst. C.E., F.G.S., &c., 27th May, 1890.*

THE UNIT MEASURE OF TIME.

I desire, at the opening meeting of this Section of the Royal Society, to bring to your attention a subject of some general importance.

For a number of years past attempts have been made on both sides of the Atlantic to effect a reform in the method of reckoning time. The degree of success which has attended the movement is a matter of surprise, when we consider that the changes involve a departure from the usages of society and are in opposition to the customs of many centuries.

The modern introduction of rapid means of communication has created conditions of life different from those of preceding generations. It may be said that until a few years back localities separated by a few miles of longitude were assumed to have distinct and separate notations of time. When many localities were first brought into close relations by the establishment of a line of railway, the different local times (so called) with which the railway authorities had to deal, produced much confusion; in order to attain security for life and property in operating the line, and likewise to promote the convenience of the public using it, it became necessary to observe a uniform notation, which received the name of Railway Time; that is to say, the many local reckonings which prevailed at the numerous points between the two termini were reduced to a single reckoning, common to the many localities.

As lines of railway multiplied, the unification of the reckoning of time became more indispensable, and it early came to be seen that the benefits to result from unification would be in proportion to the extent of territory embraced within its operations. At length it became obvious that uniformity of reckoning might with advantage be extended to a whole continent or the whole globe. Investigation also established that such an extension would contravene no law of nature or principle of science.