

House of Commons Debates.

FIRST SESSION—SEVENTH PARLIAMENT.

HOUSE OF COMMONS.

FRIDAY, 21st August, 1891.

The SPEAKER took the Chair at Three o'clock.

PRAYERS.

RECKONING OF TIME.

Mr. TUPPER moved for leave to introduce Bill (No. 106) respecting the reckoning of time. He said: The House has been put in possession of the documents relating to the fixing of time, during the present session, and these have been printed by order of Parliament and are in the hands of hon. members. I do not propose at this stage of the session, however, to do more in connection with the Bill that stands on the Order paper than ask leave to introduce it, so that the important subject to which it relates will receive the careful consideration of hon. gentlemen at a time, perhaps, more auspicious than the present for the study of the questions and the examination of papers that have been distributed to Parliament. I may, nevertheless, in moving for leave to introduce this Bill, explain its object and the reason for bringing it to the attention of Parliament. It is well known that in various countries of the world, on this side of the Atlantic as well as the other, railway companies have already adopted this system and have found it an advantage in carrying on the work of railway corporations, such as the movement of trains and traffic. In 1884 there were assembled delegates from twenty-five nations of the world at a conference in Washington, to consider the subject of a common system for the reckoning of time. I may state to the House briefly the resolutions adopted at that conference. These resolutions are incorporated in the preamble of the present Bill. The resolutions are to the effect: 1. That the prime meridian common to all nations should be the meridian passing through the observatory at Greenwich. 2. That the mean solar passage on the anti-prime meridian should be the zero for reckoning time. 3. That there should be a universal measure or standard of time common to all nations; that such universal standard should correspond and be identical with the mean civil day at Greenwich except only with respect to the notation of the hours, which should be in a single series from 0 to 24. The resolutions adopted at that conference have been approved by very many eminent scientific and important bodies of the world. I may mention briefly, as appears in the papers before

Parliament, that they have received the approval of the Astronomical Society, the Royal Society, the Imperial Board of Trade, the General Post Office of Great Britain, the Eastern Telegraph Company, the Eastern Extension Telegraph Company, the Eastern and South African Telegraph Company, the Society of Telegraph Engineers, the Trinity House, the Indian Office, the Colonial Office and the Admiralty. So that nothing really need be added to show the very great importance of the subject and the necessity of giving it very great attention. It is proposed that in the computation of time there shall be practically a universal day, and that this shall end at the same moment in this country as does the civil day at Greenwich, differing only in regard to the numbering of the hours. The day is divided, according to the Greenwich day, into halves, and, according to the notation contemplated by this Bill, into what is called the twenty-four hour system, and the numbers will be from 0 to 24. The universal time will be common to all localities, and under the provisions of this Bill the only difference will be as it passes from one meridian to another. There will be this uniformity, that the minutes and seconds will correspond, the hours merely differing as you proceed from east to west, the earth's surface being divided into twenty-four meridians or divisions from east to west, the difference between each being one hour. When it is 10 o'clock at a given point, and you proceed west one section or zone it will be 11 o'clock, the next zone 12 o'clock; the minutes and seconds corresponding, as I have said, the hours only varying according to the zones and divisions. The central line of each zone will be an hour meridian, and the hour meridians will be 15 degrees of latitude apart. They will be numbered in consecutive order towards the west from zero, the anti-prime meridian. I may mention as another reason for allowing the Bill to stand for consideration, that an examination of it will show that one of the first things to be determined is the longitude, and at present the longitude of various points in Canada is not definitely fixed. Under the work at present being undertaken by the British authorities, in connection with the Royal Society of Canada, or at all events by the authorities of McGill College, the longitude of Montreal will be fixed during the present year, and that being done, the longitude of any place in Canada can be determined. I may say that during the present year, in the Imperial Parliament of Germany, the great importance of the subject was referred to by Von Moltke in March last in dealing with a railway Bill before the German Parliament, and arguing in favour of adopting a universal standard of time; that eminent man said: