

the shipping and commercial interest generally, it is desirable to secure, as far as possible, co-operation in all the Australasian Colonies for the investigation of storms, as well as for agricultural and general climatological purposes." It had already been shown that the westerly gales which visit New Zealand, and the easterly gales occurring on the coast of Australia, were marked by premonitory signs; and some co-operative action in the transmission of information could not fail to lead to profitable results.

The resolution, after discussion, was agreed to.

Dr. Hector moved, "That, with a view of giving effect to the foregoing resolution, similar observations and the same form of publication should, as far as possible, be adopted throughout the colonies." He explained that he did not mean that no other form of observations should be published, but that the Government of each colony should be asked to sanction the expense of publishing certain observations taken at the same local hour in the form required by the Conference, so that they could be compared with each other.

The resolution, after discussion, was agreed to.

2. *First-Class Stations*.—To consider whether additional first-class stations shall be established; and, if so, in what localities.

The Chairman thought the Conference should free themselves from the task of defining what constituted a first-class station, as circumstances might arise to alter their opinion on that point.

Mr. Todd: There would in reality be only one first-class station in each colony, which would be the Observatory.

Mr. Ellery did not think it would be desirable to lay down any fixed rule on this point. The different colonies worked under different circumstances; and all that was required was to secure their co-operation.

Dr. Hector thought the number and position of the different stations should be left for each colony to determine. The Conference should not dictate to the colonies what expenditure they should incur; nor did he think they should lay down any expensive or elaborate scheme, which might have the effect of preventing cordial co-operation.

The Chairman said his object in submitting this proposition was to suggest one or two more stations in the western district. It would be seen in the map that there was a scarcity of stations in the interior; and, as most of the atmospheric disturbances came from the west, the establishment of additional stations there would supply valuable information.

Mr. Todd moved, "That, in order effectively to carry out the objects of the Conference as affirmed in the foregoing resolutions, it is desirable to establish first-class meteorological stations in certain well-selected positions in the several Australasian Colonies, including New Zealand, in addition to those now existing."

The resolution, after further discussion, was agreed to.

On motion of Dr. Hector, the Conference adopted the following definition of the work of a first-class station, given in the preface to the New Zealand Meteorological Report for 1873: "The observations taken are limited to those for determining atmospheric pressure; maximum and minimum daily temperature of atmosphere, and of insulation and radiation; the average daily amount of moisture; the rainfall and number of rainy days; the force and direction of wind; and amount and character of cloud."

3. *Similar Instruments*.—To consider the desirableness of using the same class of instruments at all stations, and making the observations at the same local hour.

The Chairman said he was aware that in some cases instruments of different kinds were used, and thus the results were not comparable. He did not think temperature observations could be exact at all stations—a different way of exposing the thermometers made such a difference in the result. With regard to the barometer, it would be sufficient to say that it should be a mercurial barometer and not an aneroid; and with respect to the wet and dry bulb, it should mean an instrument of good class, certified to by a firm of recognized position; and the same with regard to the maximum and minimum thermometers; and the rain-gauges should be used at the same altitude from the ground.

Mr. Ellery moved, "That the instruments at each first-class station consist of a mercurial barometer of either the standard or Board of Trade form; thermometers of Kew or approved patterns, compared with standards as frequently as possible; rain-gauges of 8 inches collecting diameter; and wind-gauges of any approved form. The local hours of observation to be 9 a.m., 3 p.m., and 9 p.m. Beaufort's scale of wind to be adopted; the observations to be recorded in equivalents in velocity and pressure."

The resolution, after discussion, was agreed to.

4. *Desirability of Co-operation*.—To consider the desirableness of securing the co-operation of the Governments of New Zealand and Tasmania in the system of weather telegrams which now embraces the Colonies of South Australia, Victoria, New South Wales, and Queensland.

Mr. Ellery said, with regard to Tasmania, that for the meteorological knowledge of that colony they were indebted to the long and valuable gratuitous services of F. Abbott, Esq., of Hobart Town. But in order to provide for carrying out the proposed scheme, which involved a daily expenditure for telegrams, he would move, "That it is very desirable to obtain the co-operation of the Government of Tasmania, and to persuade them to establish a station at the public expense at Hobart Town." He did not think this would be a difficult matter if the Conference suggested it. At present there was no machinery to co-operate with, and it was very desirable that one or two first-class stations should be established. He thought it would be better not to take Launceston for a second station, which was a long way inland, but rather to take George Town.

The resolution, after discussion, was agreed to.

Dr. Hector moved, "That it is desirable to secure the co-operation of the Governments of Western Australia, New Zealand, and Tasmania in the system of weather telegrams which now