and velocity of wind; (6) state of weather; (7) rainfall; (8) sea disturbances; with a synoptical report of the weather generally: and that within New Zealand the same system should be adopted.

XIX. That the extreme importance of the weather system proposed be strongly urged upon the Queensland Government, with a view to obtain their more active co-operation.

XX. That Australia be divided into six meteorological areas for transmission of reports to New Zealand—namely, Western Australia, South Australia, Victoria, New South Wales, and Queensland; South Australia being divided into two districts, tropical and extra-tropical.

XXI. That weather telegrams be written on paper of a special colour, so as to be readily distinguishable in the offices.

XXII. That the solar-radiation thermometers should be blackened-bulb thermometers *in vacuo*, and should be exposed on an open space at an elevation of 4 feet 6 inches from the surface of the ground, supported by a post carrying two light arms.

XXIII. That radiation thermometers be placed over grass.

XXIV That the following subjects for experiment be referred to each member of the Conference, for future consideration and report: (1.) Shade temperature. (2.) Swinging thermometer, and thermometer sheds in use. (3.) Standards to be swung with 2 feet 6 inches string during sunshine and after sunset. (4.) Observations to determine the difference in humidity by self-registering maximum and minimum thermometers, and by other methods. (5.) The best method of measuring the velocity and pressure of wind. (6.) Whether any better method than the black-bulb thermometer can be devised for measuring the direct effect of the sun. (7.) As to the best method of determining spontaneous evaporation.

XXV That, as investigation of the Newcastle tide-gauges has shown that such instruments give valuable indications of distant earthquakes, gales, and sea disturbances, it is desirable, in the opinion of the Conference, that self-registering tide-gauges be established in as many convenient places as possible on the coast in connection with the Meteorological Departments of the different colonies.

XXVI. That the foregoing minutes be adopted as the report of this Conference on the various matters referred to it, and that the Chairman be requested to report to the Government of New South Wales.

REPORTS.

3. Resolved:—XXVII. That, as a preliminary proceeding, each member should report the action taken in the colony represented by him with regard to the recommendations of the last Conference.

Report by Dr. Hector.

4. Dr. Hector accordingly reported as follows:—With regard to Resolution II.: The forms for the publication of meteorological statistics have been altered so as to meet the views adopted at the last Conference. The forms now used by first-, second-, and third-class stations respectively now submitted.

5. Under Resolution III.: Changes in the department have led to a reduction of the first-class stations from eighteen to three, which he thought to be quite a sufficient number to afford all the data required for complete meteorological statistics, especially as it is contemplated to furnish these stations with complete sets of continuous self-recording apparatus. The number of second-class stations has, however, been largely increased, and their equipment very much improved.

6. Under Resolution VII.: The New Zealand Government are favourably disposed in regard to the co-operation requested, and to provide the means suggested by the Conference, but the matter has not yet been brought before Parliament, the proposition being considered somewhat indefinite.

7 Under Resolution VIII.: Correspondence was read and handed in relative to the changes that had been made in the relations of the Meteorological and Weather Departments of New Zealand, partly in accordance with the recommendation of the Conference and partly on account of certain changes in the direction of retrenchment. Since 1874 there has been a Weather Signal Department under the charge of Captain Edwin, quite distinct from the Meteorological Department, which furnished the statistics. The papers handed in by Dr. Hector, and marked "A," showed that he had recommended the reference to Captain Edwin of the report made by the Sydney Conference, for report—(1) As to how far the suggestions could be given effect to by his department; (2) as to preventing duplication of observations by combining the work of the two departments; and (3) as to preserving the reports on which the weather signals are founded, in order that the conclusions may be reviewed in the future. In Captain Edwin's reply, he drew attention to the expense involved in sending the daily synoptical report; to certain phenomena, indicating that, in his opinion, the meteorological connection between Australia and New Zealand is not so close as might be reasonably supposed; to the probability that information from Queensland would be more useful to New Zealand than that from other colonies; to Mount Peel as a site for a mountain station, and to the doubt whether the results from only one such station would be worth the expense; and to the desirableness of assimilating the system of registration to that used in the United Kingdom; he stated his preference for a direct statement (in weather-warnings sent to New Zealand) of the position and route of any storm-centre affecting that country, with an example; he considered that certain suggestions in regard to telegraphic messages were not necessary; that, while high tides are now predicted in New Zealand, additional information would improve these warnings, and that tide-gauges would collect valuable data. Attached to this paper were notes thereon by Mr. Ellery and Mr. Russell. Mr. Ellery remarked that the cost of telegrams would be but a trivial sum to each colony, say £90 or £100, and would be reduced by the joining of other colonies; that the weather telegrams should not be complicated by any deductions regarding a single locality—though early intimation of any great disturbance, if added to the ordinary telegram from the colony where it originated, would be very valuable. The suggestions as to telegraphic messages, considered by Captain Edwin unnecessary, would secure promptitude in telegraph offices. The tide-gauges were not for prediction purposes, but to furnish knowledge concerning abnormal tides, or disturbances of normal ones. Mr. Russell expressed in his remarks the same view as Mr. Ellery did concerning the expense of telegrams; observed that, the Conference