that storm centres pass from west to east over Australia and New Zealand at such a rate as permits of important telegraphic warning being given of approaching gales; and that it is of very great importance so to extend and complete this system that it may include all Australia and New Zealand.

154. In the discussion upon the above resolution, Mr. Russell, Mr Todd, and Dr. Hector detailed minutely numerous and well-marked instances of the facts upon which the resolution was based. (*Vide* Appendix No. 2.)

155. On the motion of Dr. Hector, it was resolved unanimously,—XLV That additional barometer stations be established in the interior of Australia, with the view of tracing the latitude of passing storm centres.

156. On the motion of Mr. Todd, it was resolved,—XLVI. That the Government of New South Wales be requested to communicate with the Government of New Caledonia, and that the Government of New Zealand be requested to communicate with the Government of Fiji, in order to obtain regular observations from those countries.

157 Dr. Hector stated that Mr. Holmes, a resident of Fiji, an able observer, had been furnished by the Government of New Zealand with a complete set of instruments, and had supplied statistics regularly since 1872, which had all been published.

158. Mr. Russell said that he had sent instruments to New Caledonia, with a request that observations might be regularly sent to him, but that these had ceased to be received after the first two months.

Daily Weather Map.

159. Mr. Russell proposed that a map, including Australia and New Zealand, be adopted for plotting the information upon for daily publication.

Mr. Ellery submitted a specimen map.

160. Dr. Hector said that it was necessary that, upon any map used for this purpose, the gaps in the mountains should be marked.

161. Mr. Russell remarked that in New South Wales there was a meteorological pass of very great importance, which was a low place in the mountains at the head of the valley cut by the Hunter River; and stated that he could often see the storms coming from the other side of the range long before they reached Sydney These disturbances came along the valleys and passed out upon the coast at Port Macquarie.

162. On the motion of Mr. Russell, it was resolved,—XLVII. That the weather map be upon the scale of the map submitted by Mr. Ellery; that the projection to be used shall be Mercator's; that the direction of the wind be indicated by arrows; and that the map shall include New Zealand, Fiji, New Caledonia, and Batavia, &c.

163. It was agreed that Mr. Ellery should have proof-maps struck off, which should be sent to the delegates, in order that each may put in the principal features of his colony

Tide-Gauges.

164. On the motion of Mr. Ellery, it was resolved,—XLVIII. That self-registering tide-gauges be established at the Semaphore, Guichen Bay, and Victor Harbour, in South Australia; at Portland and Gabo Island, in Victoria; in New South Wales, one at Clarence River in addition to those now in use at Sydney and Newcastle; at Brisbane, in Queensland; and at Pencarrow, the Bay of Islands, Lyttelton Heads, Otago Heads, Puysegur Point, and New Plymouth, in New Zealand.

165. Resolved,—XLIX. That Messrs. Ellery and Russell be requested to report upon the best form for, and the cost of, a tide-gauge to be adopted; the report to be forwarded to each member of the Conference as soon as the inquiry is completed.

Standard Instruments.

166. On the motion of Mr. Todd, it was resolved,—L. That, with a view to the observations being referred to one uniform standard, a complete set of standard instruments be purchased for circulation between the four chief stations—viz., Melbourne, Sydney, Wellington, and Adelaide—the cost to be divided between the four colonies represented at this Conference. The instruments to comprise—Barometer, thermometer, maximum solar thermometer, and anemometer.

167 At the suggestion of Mr. Russell, it was agreed that the results of comparison should be sent on with the instruments.

Conditions of Observation.

168. On the motion of Mr. Ellery, it was resolved,—LI. That the following conditions of observation be observed—viz., that thermometers be exposed on the stands and close to those with which they are to be compared; the barometer to be hung close alongside the standard with which it is compared; the solar thermometer to be exposed in exactly the same conditions as that used for ordinary registration; and the anemometer to be exposed near to, and upon the same level with, the fixed instrument.

169. Mr. Todd moved, That all readings of the several instruments in use be reduced to a common standard.

The consideration of this motion was deferred until the results of the experiments should be known.

Form of Statistics.

170. On the motion of Mr. Todd, it was resolved,—LII. That, although absolute uniformity in the form of publication of meteorological statistics is not considered essential, whatever form is adopted should give—(*a*) Barometer reduced to 32° and sea-level at least at one of the hours agreed upon at the last Conference (9 a.m., 3 p.m., 9 p.m.), and the principal turning-points (also reduced), with the times of their occurrence; (*b*) the temperature of the air at the same hour or hours, also the maximum and minimum; (*c*) wet-bulb thermometer readings at the same hour or hours, or the humidity; (*d*)