

amount and character of cloud, and upper current of cirri or high cloud; (e) direction and force or velocity of wind; (f) rain during previous twenty-four hours, recorded at 9 a.m.

171. It was agreed that 9 a.m. local time should be adopted as the common epoch of these observations.

172. During the discussion on the above resolutions, Mr. Russell asked Mr. Ellery whether in his experience so many as 1 per cent. of cases occurred where the maximum temperature of the day occurred in the morning before 9 a.m. Mr. Ellery having replied in the affirmative, Mr. Russell expressed a doubt whether the cases were numerous enough to make their record of any value, and his conviction that that value would never compensate for the disadvantage of heating the thermometers with a lamp at night when reading them.

173. The suggestion contained in Mr. Todd's notice of motion (*vide par.* 65, c, β), that a maximum reading be taken at 9 p.m., was therefore rejected.

174. On the motion of Mr. Todd, it was resolved,—LIII. That the chief stations at Melbourne, Sydney, Wellington, and Adelaide should, in addition to the foregoing, give maximum solar thermometer, and minimum on grass, hours of sunshine, and the evaporation read off at 9 a.m. and 9 p.m.

Ozone.

175. On the proposition contained in Mr. Todd's notice of motion, that ozone observations be made at 9 a.m. and 9 p.m., Dr. Hector moved, Mr. Russell seconded, and it was unanimously resolved,—LIV. That, on account of the uncertainty of the tests adopted to detect ozone, the continuance of observations on ozone be optional with each Director.

Hourly Readings at Principal Stations.

176. Mr. Todd moved, That, in addition to the observations already resolved on, Melbourne, Sydney, Wellington, and Adelaide should publish hourly readings of barograph (reduced to 32° and sea-level), thermograph, and anemograph. The motion was negatived.

Curve-sheets and Synopses.

177. On the motion of Mr. Todd, it was resolved,—LV That (carrying out Resolution XIV. passed at the previous Conference curve-sheets with synoptic reports on weather should be exchanged monthly. It is recommended that these curves should show barometrical pressure at sea-level, temperature of air, direction and force or velocity of wind, and rainfall, and that the synopsis should be in sufficient detail to trace storms and other atmospheric disturbances. There should be a sufficient number of stations selected in each colony to supply data for forming isobaric maps for every day.

Adopted Mean Temperature.

178. Mr. Todd moved, That the adopted mean temperature should be deduced from the minimum, the 9 a.m., the maximum, and the 9 p.m. readings, and that at the four principal stations this mean should be compared with the hourly means.

179. Mr. Ellery, in reply to a question, stated that at his Observatory the mean was arrived at by taking the mean of all the observations of the day, and applying to it a correction deduced from the hourly observations.

180. Mr. Russell preferred to have the maximum and minimum observations without any correction.

181. Mr. Todd concurred with Mr. Russell, and explained that he read his minimum at 9 a.m. and maximum at 9 p.m. It of course occasionally happened in the summer that a lower temperature than the minimum recorded at 9 a.m. was reached at a later hour during the same day when a southerly wind set in after a hot wind.

182. Dr. Hector considered it would be sufficient to take as the mean for the day the mean of the maximum and minimum, as the thermograph gave all the intermediate variations. He much preferred morning readings to those taken in the evening.

183. In deference to a general consensus of opinion, Mr. Todd consented to omit the recommendation of using the 9 a.m. and 9 p.m. readings in deducing mean temperature.

184. Whereupon it was resolved,—LVI. That the adopted mean temperature be deduced from the maximum and minimum of the day read at 9 a.m., and at the four principal stations this mean should be compared with the hourly means obtained from the thermograph.

Exposure of Thermometers.

185. Mr. Todd moved, That the exposure of thermometers be uniform, or, if that cannot be effected, the four principal stations, or one of them, should mount thermometers on each plan adopted by the other colonies and compare the readings on each kind of stand with the readings of a rotatory thermometer in the shade.

186. Mr. Russell suggested that this would not be necessary if a thermometer were sent round for comparison.

187. Mr. Ellery remarked that the proposal might be referred for a report to be brought up with the further experiments to be made with swing-thermometers; and the motion was postponed accordingly.

Dry- and Wet-Bulb Thermometers.

188. Mr. Todd moved, That the dry- and wet-bulb thermograph readings should be compared with the readings of the standard or ordinary dry- and wet-bulb thermometers at 9 a.m., 3 p.m., and 9 p.m., and the readings of the thermograph should be referred to those of the ordinary dry and wet, or the corrections supplied. He suggested that this might be left to each person who had a thermograph.