

SUMMARY OF OBSERVATIONS.

MARCH, 1905.

General Summary.—The month under review was of an exceedingly unstable character, being the roughest and most boisterous for some considerable time past. Nearly throughout the conditions were under the influence of disturbances from the Atlantic, the great majority of them skirting our western and northern coasts, so that a mild, damp South-Westerly type of weather prevailed most of the time. Several of the disturbances were deep, particularly the one which reached the Irish coast in the night of the 14th-15th, when the barometer at Valencia fell at an unusually rapid rate, 0·7 in. in 5 hours, and 0·84 in. in 7 hours, subsequently rising 0·32 in. in 2 hours. This depression produced a gale over practically the entire Kingdom, and over the southern half and on the English Channel and Bay of Biscay it was very severe, a "whole gale" or "storm" being reported in many places, with high, turbulent seas running. Gales were experienced with most of the other disturbances, but they were neither so general nor so severe as that specially referred to. There was an abnormal check to the rise of the tide in the Thames during the South-Westerly gale of the 11th. Rain, hail or sleet fell almost daily, and in numerous instances the amounts were large, the result being that the marked dryness of the preceding two months was made up for in many localities. During the most stormy period of the month, between the 5th and 17th, thunderstorms were unusually frequent for the time of year, thunder or lightning alone being very common. Notwithstanding the unsettled and rainy conditions there was a great deal of fine bright weather in the intervals. On the night of the 2nd an auroral display was witnessed in the western and north-western districts. Earthquake shocks were felt in the neighbourhood of Barnet on the 15th. Taking the month as a whole pressure was decidedly below its usual level; temperature was well in excess; the winds were mainly from between South and West, frequently strong to a gale in force; rainfall was in excess except in the extreme east of England; and bright sunshine was above the normal except at various stations in Scotland and on the English Channel.

Pressure.—*Mean at 8 a.m.* ranged from 29·82 ins. at Jersey and above 29·7 ins. at most southern stations in England to below 29·5 ins. in the extreme north and north-west and to 29·43 ins. at Stornoway. The values were everywhere below the average,* the smallest defect being 0·15 in. at Dungeness and Jersey, the largest 0·38 in. at Malin Head. The distribution of mean pressure was of a South-Westerly type, the normal being more Westerly, and the gradient much steeper than usual. *Highest* readings occurred between the 2nd and 4th, when 30·3 ins. was reached in nearly all parts of England, 30·38 ins. at Jersey. *Lowest* readings were recorded on the 11th, 28·44 ins. at Aberdeen and 28·45 ins. at Sumburgh Head, and on the 15th, 27·92 ins. at Malin Head, nearly every station passing below 29 ins. *Range* was large everywhere, from 1·2 in. at Clacton-on-Sea to upwards of 2 ins. at all Irish stations, 2·3 ins. at Malin Head.

Depressions.—Map 2, Plate III, shows that numerous low pressure systems visited our neighbourhood, a few unimportant ones appearing in the English Channel region, but the great majority skirting the western coasts, going northward, their centres, in nearly all cases, being out on the ocean. These western disturbances followed each other in rapid succession, and in several instances they were very deep, with barometer readings below 29 ins. at the centres, the deepest being that of the morning of the 15th in the north of Ireland.

Anticyclones.—The month opened with an anticyclone of moderate intensity moving in upon us from the north-westward. Its centre was over the western portion of England on the 3rd, but by the night of the 4th it had passed away from our shores. This was the only high-pressure centre of the month over our islands, even the foreign ones being a considerable distance away as a rule.

Winds.—On the north-east coasts of Britain there was a considerable proportion of South-Easterly winds, but over the country generally the current was largely from between South and West. Gale force was attained on 13 days at Malin Head and Blacksod Point, 11 days at Portland Bill, 10 days at Deerness, and 9 days at Jersey, Pembroke, and Valencia.

Temperature.—*Mean at sea level* ranged from slightly above 48° at Scilly and above 45° over nearly all the southern districts to below 43° over northern Scotland, 40°·5 at Fort Augustus. The absolute mean values were, with the sole exception of Valencia, above the average,* the excess amounting to 3° and upwards in numerous instances, and to 3°·7 at Buntingford. *Highest* readings were attained in most places on the 22nd or neighbouring days, 60° and upwards being recorded in many localities, 62° at Dublin (Phoenix Park and Trinity College) and at several stations in England, 63° at Bawtry, Maidenhead, Brixton, and Bettws-y-Coed, and 66° at Leith. *Lowest* values occurred generally on the 3rd or 4th, 16° at Braemar, 22° at Fort Augustus, Llangammarch Wells, and Wokingham, and 23° at Felixstowe, Littlestone-on-Sea, Maidenhead and Dublin (Phoenix Park). *Range* varied from 40° at Maidenhead and Wokingham, 39° at Dublin (Phoenix Park), and 38° at Epsom and Llangammarch Wells, to 19° at Falmouth and Portland Bill, 18° at Scilly and Blacksod Point, 16° at Deerness, and 14° at Sumburgh Head. *Vapour Pressure* ranged from 0·27 in. at Scilly, Jersey, and Holyhead, to 0·21 in. at Nairn. *Relative Humidity* at 8 a.m. was as high as 93 per cent. at Birr Castle, and 92 per cent. at Clacton-on-Sea, against 84 per cent. at Liverpool and 83 per cent. at Leith.

Rainfall.—With a few exceptions, the month's precipitation was in excess of the average,* by 3 ins. or more in several localities, 4 ins. at Laudale and Killarney, and 4·7 ins. at Valencia. Aggregates exceeding 5 ins. were numerous, and ranged up to 8·1 ins. at Killarney, 8·4 ins. at Glencarron, 8·6 ins. at Valencia, and 10 ins. at Laudale, against 1·1 in. at Newcastle and 1·2 in. at Durham and Spurn Head. At Durham there were only 11 days with rain, and some other north-east coast stations had 15, but over the country generally there were at least 20 wet days, ranging up to 29 at Roche's Point, Edenfel, and Lairg, and 30 at Valencia. Although heavy falls were frequent only a few stations had as much as an inch on any one day, and at the majority of these the fall occurred on the 10th. The heaviest fall was 1·4 in. at Glencarron.

Bright Sunshine was in excess of the average* except at various stations in Scotland and about the English Channel. The deficiency at Guernsey (Fort Road) was 35 hours, at Aberdeen 41 hours, and at Deerness 43 hours, whereas Llandudno had an excess of 41 hours, Armagh of 52 hours, and Blackpool of 53 hours. The percentage of possible duration ranged from 45 at Rhyl to 21 at Manchester (Whitworth Park) and Strathpeffer, and 18 at Deerness and Fort Augustus.

* The averages employed are—*Pressure and Temperature* for the 30 years 1871-1900; *Rainfall* for the 35 years 1866-1900; and *Bright Sunshine* for the 20 years 1881-1900. See Appendix III. "Weekly Weather Report," 1901.