

SUMMARY OF OBSERVATIONS.

AUGUST, 1905.

General Summary.—Unlike the preceding three months, August proved a very unsettled period nearly throughout. The disturbances which reached our shores were rather numerous for the time of year, but as a rule they were of no great intensity, resulting more in wet weather than in wind storms. The accompanying rain was both frequent and heavy, large falls in 24 hours being commonly experienced, and over the eastern parts of Ireland there were rainstorms of exceptional severity about the 25th, when the amounts registered in the Dublin district were between 3 ins. and 4½ ins., which brought about a destructive flood at Bray. The north-western portion of England also received considerable quantities of rain at the same time. It is of interest to note that this remarkable rainstorm, like many others of a similar character, occurred during the prevalence of an Easterly wind in front of a cyclonic system of moderate depth which moved slowly northward from Land's End up St. George's Channel. Thunderstorms were numerous and visited nearly all districts; in some instances these were very severe and were accompanied by heavy local rains. For the month as a whole pressure showed a moderate deficiency; temperature was nearly everywhere under the normal; the winds varied greatly in direction; rainfall was in excess in most localities; and bright sunshine was in defect very generally.

Pressure.—*Mean at 8 a.m.* ranged from 29.95 ins. at Jersey and above 29.85 ins. over the more southern parts of England and Ireland to below 29.76 ins. in the extreme north-east of Scotland, and to 29.74 ins. at Sumburgh Head. The values were in every instance below the average*; but the deficiency was not large in any locality, from 0.03 in. at Stornoway to about 0.08 in. at some of the southern stations. The distribution of mean pressure did not differ from the normal to any material extent, except in the far north and west, where it was more of a North-Westerly than a South-Westerly type. *Highest* readings were registered on the 12th, 30.3 ins. and upwards in the south of England, 30.36 ins. at Jersey, and on the 31st, 30.4 ins. and upwards in the western districts, 30.46 ins. at Pembroke, and 30.48 ins. at Valencia. *Lowest* readings occurred on the 3rd and 4th, 29.00 ins. at Valencia and nearly as low at many other western stations; on the 18th and 19th, below 29.2 ins. in the north of Scotland, 29.08 ins. at Sumburgh Head; and on the 28th and 29th, 29.20 ins. at Yarmouth. *Range* was moderate, from slightly less than an inch at some of the eastern and southern stations to 1.4 in. at Pembroke and Roche's Point and 1.5 in. at Valencia.

Depressions.—A few of the disturbances of the month passed on a north-easterly course outside these Islands, but the great majority came ashore on various parts of our south-western coasts, and travelled eastwards or north-eastwards across the country. The deepest of the series made its appearance off the south-west of Ireland on the 2nd, subsequently skirting the south coast, and on the morning of the 4th, suddenly changing its course, it passed up the east of Ireland and finally reached northern Scandinavia. Another deep one crossed the Hebrides in the night of the 18th. The depression which reached southern Ireland on the evening of the 27th, and afterwards crossed our Midland Counties on its way to the Baltic and North Russia became gradually deeper as it advanced.

Anticyclones.—For the most part the regions of high pressure were situated over the south-western, western or eastern portions of the Continent, but one which appeared on the Portuguese coast on the 10th moved northward, and from the 12th to the 16th it embraced our Islands. The maximum pressure was attained on the 31st, in an anticyclone the central space of which moved down our western districts for the Bay of Biscay.

Winds.—The frequent disturbances moving across the country produced winds from all quarters of the compass, but the general results for the month show the prevailing directions to have been North-Easterly to North-Westerly and Westerly in the north, and Westerly to South-Westerly in the south. On our western and southern coasts the wind often blew with great strength, the force of a gale being attained at Portland and Jersey on 9 days, at Pembroke and Llandudno on 7 days, and at Holyhead and Spurn Head on 5 days.

Temperature.—*Mean at sea level* ranged from 63° at Jersey and above 60° over the extreme south and south-east of England to below 56° in the north of Scotland, and to below 54° at Sumburgh Head. The general distribution differed somewhat from the normal, notably in the transfer of the warm area from our inland counties to the Thames Estuary. In nearly every instance the mean values were below the average*, the deficiency being more than 2° at several stations, and nearly 4° at Llangammarch Wells. The maximum and the minimum values were recorded on very varied dates, the former mainly round the 15th, the latter round the 24th. *Highest* readings, 81° at Oundle and 80° at Brighton on the 15th, 79° at Maidenhead on the 14th, and 78° at Bawtry on the 15th. *Lowest* were 35° at Llangammarch Wells (24th) and Garforth (17th), 36° at Wokingham (24th), and 37° at Marlborough, Swarraton, Nairn (24th), and Cally (31st). *Range* was nowhere very large, 39° at Maidenhead and Oundle, and 38° at Bawtry, Marlborough and Swarraton, 20° or less at several coast stations, 16° at Pembroke, Guernsey and Sumburgh Head, and 15° at Deerness and Scilly. *Vapour Pressure* ranged from 0.43 in. or 0.44 in. at the extreme southern stations to 0.35 in. in the north-east of Scotland. *Relative Humidity* was as high as 93 per cent. at Spurn Head and 91 per cent. at Stornoway, against 77 per cent. at Yarmouth and 76 per cent. at Leith.

Rainfall.—At three-fourths of the stations in Great Britain and at nearly every station in Ireland the rainfall was above the average*, the excess at some western stations being between 2 ins. and 4 ins. Many places, chiefly in the west, had aggregates exceeding 5 ins., ranging up to 8 ins. at Glencarron, and 8.6 ins. at Newcastle (Wicklow). There were many records of more than an inch of rain in a day, the largest falls occurring in the eastern parts of Ireland on the 25th, when there were several instances of more than 3 ins., Newcastle (Wicklow) registering 4.1 ins. and Bray, Fassaroe (not included in the tables) 4.5 ins. The days with rain numbered 28 at Stornoway and 26 at Lairg and Valencia, ranging down to 13 or 14 at various stations in the east of England, and 12 at Broadstairs.

Bright Sunshine.—With only a few exceptions the records of bright sunshine were less than the average*, the deficiency as a rule, not being large, but Dublin (Phoenix Park) returned a loss of 38 hours, and Cullompton of 50 hours. The percentage of possible duration ranged from 51 at Jersey and Guernsey, and 49 at Scilly and Littlestone-on-Sea, to 21 at Strathpeffer and 16 at 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.