

SUMMARY OF OBSERVATIONS.

MAY, 1902.

General Summary.—The weather of May was for the most part cold and changeable, with frequent showers in all districts, and with occasional falls of hail, sleet, or snow in several parts of Great Britain. At the close of the third week the conditions became for a time much finer and warmer, but at the end of the month unsettled rainy weather set in very generally. Thunderstorms, or thunder only, occurred at various times—mostly over England, and in the earlier half of the month. Pressure was high in the west and south, but low in the north and east; temperature was considerably below the average; the winds were mainly from between North and West; rainfall was in excess of the average in most places; bright sunshine was deficient, excepting at a few isolated places in the west and north.

Pressure.—Mean at 8 a.m. ranged from 30·10 ins. and upwards over the south-west of Ireland and the adjacent parts of the Atlantic to between 29·90 ins. and 29·92 ins. on the east coasts of Great Britain, and to a little below 29·85 ins. in the Shetlands. The marked uniformity in pressure usually existing in May was therefore replaced by a decided north-westerly gradient, the mean values being a little above the average* in the western and southern districts, but a little below it in the north and east. *Highest* readings occurred on the 7th or 8th, or on the 22nd or 23rd; on the earlier dates the barometer rose to 30·5 ins. and upwards in the west of Ireland and to 30·3 ins. and upwards in the western and northern parts of the kingdom generally, while on the latter dates it rose to 30·5 ins. and upwards in the south of Ireland and the south-west of England, and to 30·3 ins. and upwards in all our more western and southern districts. *Lowest* readings occurred in most places on the 17th, when the barometer fell to 29·2 ins. and less over the greater part of Scotland and the north of England, and to 29·4 ins. and less in nearly all other parts of the United Kingdom. In the extreme north of Scotland the lowest readings were observed on the 28th, when the barometer fell below 29·0 ins. in the Hebrides, and below 28·9 in the Shetlands. *Range* was moderate.

Depressions were rather numerous for the time of year, but were, as a rule, of little intensity. In some few cases the centres moved in an easterly direction across our more northern districts, but in many instances the disturbances were developed over Scandinavia or Denmark. The frequency with which the latter country was visited by the various barometric minima of each class is clearly shown in Map 2, Plate V., and accounts in a large measure for the abnormal distribution of mean pressure exhibited in Map 1.

Anticyclones.—Three such systems were observed. The first spread in from the Atlantic on the 5th, and covered the major part of Western and Northern Europe until the 10th, the central portion of the system being situated almost constantly off our own western coasts. The second spread over from the Atlantic on the 20th and remained with us until the 26th, when it moved away to the southward, the central area being found usually over the Bay of Biscay. The third was formed over Scandinavia on the 30th and extended over the extreme northern parts of our islands at the close of the month.

Winds were mostly from some point between North and West, the prevalence of Southerly and Easterly winds being unusually small for the time of year. Scarcely any gales were experienced in the south and east, but in other districts they were more numerous, the number of days affected being as large as 11 at Malin Head, 9 at Stornoway, and 8 at Morpeth (Cockle Park).

Temperature.—*Mean at sea level* ranged from 51° 5 at Scilly and 50° and upwards at Jersey and at several stations in the southern parts both of England and Ireland (an area of relative warmth being found also over the south-east of Scotland) to 45° and less in the north of Scotland, and to 43° and less in the Shetlands. The general distribution over our islands showed a fair agreement with the average,* but the mean values were everywhere low, the departure from the normal exceeding three-and-a-half degrees in many places, and amounting to between four-and-a-half and five-and-a-half degrees in some parts of Central Scotland. *Highest* readings were recorded as a rule on the 23rd or 24th, when the thermometer exceeded 70° in many parts of Great Britain, the highest readings recorded being 76° at Alnwick Castle and 75° at York. *Lowest* readings were registered at various times in the different districts, but mostly about the 6th, the 10th, or the 14th, on each of which occasions frost occurred in several parts of the kingdom; at Cirencester and Littlestone-on-Sea the thermometer on the 14th fell to 25°, while at Braemar on the 10th it went as low as 23°. *Range* was moderate for the time of year. *Vapour Pressure* ranged from 0·30 in. and upwards over the western parts of the English Channel and 0·28 in. and upwards on most parts of our western and southern coasts to between 0·22 in. and 0·24 in. on the north and east coasts of Scotland. *Relative Humidity* ranged from 90 per cent. at Malin Head and Portland Bill to 75 per cent. and less over Central Scotland, and to 72 per cent. at Leith and also in London.

Rainfall was in excess of the average* over the United Kingdom generally, but showed a deficit at most of the south-western stations, and also in the south midland counties and in isolated parts of Scotland. The largest aggregates reported were 6·1 ins. at Glencarron, 5·7 ins. at Laudale, and 4·5 ins. at Fort William; the smallest being 1·3 in. at Pembroke, Scilly, and Dungeness, 1·4 in. at Roches Point, and 1·5 in. at Kilkenny and Littlestone-on-Sea. The number of days with rain was very large, more than 20 being reported in nearly all districts, and more than 25 at several places in the extreme northern and north-western parts of the kingdom. Snow or sleet showers occurred in many parts of Great Britain between the 4th and 6th, and again at several of our northern and eastern stations between the 12th and 14th.

Bright Sunshine was deficient over the United Kingdom as a whole, a slight excess being however reported at a few isolated places in the western and northern parts of Great Britain. The percentage of the possible duration ranged from 53 at Guernsey, and 50 or slightly above it on some parts of the Cornish coasts, to 30 or less at several of the Scotch stations and at Birmingham, and to only 20 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.