

SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

JANUARY 1894.

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General Summary.—The early part of January was very inclement, intense frost prevailing over the whole kingdom, with Easterly gales and snowstorms in many places. Towards the middle of the month, however, the wind shifted to the Southward and finally to the Westward, and for the remainder of the time mild humid weather prevailed generally, with frequent rain, and with occasional falls of snow or sleet in the more northern parts of the country. Thunder and lightning were occasionally reported in the west and north. *Pressure* was low especially in the north; temperature also was slightly below the average; the winds were mainly from the South-westward or Westward; rainfall was in excess of the normal, but the amount of bright sunshine was large excepting in isolated parts of Ireland and Scotland.

Pressure.—*Mean at 8 a.m.* ranged from 29·90 ins. and upwards over the southern parts of the English Channel to 29·45 ins. and less in the Hebrides, the general distribution being in close agreement with the normal. The actual values were, however, in all cases below the average,* and as the deficiency was least (0·15 in. or less) over England and the south of Ireland, and greatest (0·25 in. or more) on our extreme north and north-west coasts, the gradient for South-westerly winds was steeper than usual. *Highest* readings were observed on the 3rd, when the barometer ranged from 30·3 ins. and upwards in the north-eastern parts of Great Britain to about 30·4 ins. on our extreme south and south-west coasts. *Lowest* readings were registered in the north on the 27th or 28th, when the mercury fell to about 28·5 ins. in the Shetlands, and to 29·0 ins. or less over Scotland generally. In the extreme southern parts of the kingdom the absolute minima, which occurred on the 20th or 22nd, were not much below 29·5 ins. *Range* was consequently small in the south, but large in the north; in the Shetlands it amounted to about two inches and a quarter.

Depressions.—Between the 4th and 6th a large but somewhat shallow depression advanced slowly from the Portuguese coasts to the south-west of our Islands, where it gradually dispersed. During the ensuing week a series of depressions travelled northwards outside our extreme western coasts, while for the remainder of the month the weather was influenced by a number of large and deep disturbances which skirted the north of Scotland and passed eastwards or north-eastwards to Scandinavia. On the 31st a well-marked secondary system advanced in an east-south-easterly direction across Ireland, but on reaching Wales the disturbance filled up.

Anticyclones.—At the commencement of the month a large anticyclone of considerable intensity spread over our Islands from Scandinavia, but after the 4th the system gradually receded to the eastward, and eventually passed away to Russia. During the latter half of the period the nearest anticyclone was located over Spain.

Winds were chiefly from West or South-west, but in the extreme north of Scotland the South-easterly current was largely represented. Gales were numerous, especially in the west and north; at Malin Head and Donaghadee gale force was reached on as many as 18 days, and at Aberdeen on 16 days.

Temperature.—*Mean at Sea Level* ranged from a little below 45° at Scilly, and from 42° and upwards at most of our extreme south-western stations to 37° or less in several distinct areas lying over the eastern parts of Great Britain, and to a little below 36° at Lairg. The general distribution showed a fair agreement with the normal, but the actual values were below the average* at nearly all stations, the deficit being slight in most places, but rather large (2° to 3°) in the south of Ireland. *Highest* readings were observed as a rule on the 10th or 11th, but in the east of England they occurred mostly on the 17th or 27th. *Lowest* readings were recorded between the 5th and 7th, when severe frost occurred generally; readings below 10° were observed in many parts of the kingdom, the lowest of all being—4° at Braemar, 0 (zero) at Bawtry, and 2° at Ochtertyre and Waterford. *Range* was very large,—exceeding 40° in several places, and amounting to as much as 50° at Braemar and Waterford, 52° at Loughborough, and 53° at Bawtry. *Vapour Tension* ranged from between 0·23 in. and 0·26 in. on our extreme south-west coasts to 0·20 in. or less over central Ireland and the eastern and central parts of Great Britain, and to 0·18 in. at Aberdeen. *Relative Humidity* was least (85 per cent. or less) in the east of Scotland and the extreme west of Ireland, the highest values being 96 per cent. at Donaghadee and 95 per cent. at Stornoway and Prawle Point.

Rainfall varied greatly in different parts of the country. At many of the eastern and central stations in England the amount was less than the average* but in most other localities there was an excess, the divergence from the normal being greatest in the north of Ireland. The largest aggregates for the month were 12·3 ins. at Fort William, 11·0 ins. at Glencarron, 10·9 ins. at Laudale, and 9·3 ins. at Killarney; while the smallest amounts were 1·1 ins. at Durham, 1·2 ins. at Shields and Yarmouth, and 1·3 ins. at Spurn Head. Falls exceeding an inch in 24 hours were experienced only in the west of Scotland, and at Waterford, but the number of rainy days was large in all districts, more than 25 such occasions being recorded at several stations; at Stornoway and Hawes Junction there were 28 days with rain, and at Sumburgh Head as many as 29.

Bright Sunshine was in excess of the average* at all but one or two of the Irish or Scotch stations, and especially so in London, where the amount was nearly twice as much as the normal. The percentage of the possible duration ranged from 31 at Brighton and Westbourne, and 30 at Southampton and Jersey to 7 at Fort William and Manchester and to 5 at Fort Augustus.

* The averages employed are—*Pressure* and *Temperature* for the 20 years, 1871-90; *Rainfall* for the 25 years, 1866-90; *Bright Sunshine* for the 10 years 1881-90.