SUMMARY OF OBSERVATIONS.

MAY, 1906.

General Summary.—The weather during May was of a much more variable and unsettled character than had been experienced in the immediately preceding months, but it was far from being stormy. Areas of high and of low pressure were rather numerous, and their movements somewhat erratic, but as both the anticyclonic and the cyclonic systems were of very slight intensity the winds were very variable in direction and of no great strength. On many days, and especially between the 12th and 21st, pressure was highest to the westward, northward and north-eastward, producing a marked prevalence of winds from between North-West and North-East, which had a decidedly adverse influence on the day temperatures. Days with the thermometer well above 70° were exceptionally rare, while afternoon maxima below 50° were reported in some part of the country nearly every day. At Sumburgh Head the highest point reached on the 16th was only 40°, and even so far south as Holyhead the maximum on the 25th was no higher than 50°. Generally speaking, the nights were relatively milder than the days, but there were several in which frost occurred in the shade, minima between 28° and 32° being registered as late as the morning of the 22nd in England, Ireland and Scotland. Sharp ground frosts were frequently experienced in many localities, particularly at the commencement and in the third week. Normally, May is the brightest month of the year, but the period now under review was exceedingly dull, the sunshine records showing a loss of from one to nearly four hours per day, the total duration being, roughly, little more than one-half of what the country received in April. During the first half the weather was rather dry in the southern districts, but it did not amount to a drought, London returning 12 consecutive rainless days. A very heavy rainstorm occurred over the north-eastern counties of England on the 19th, the fall exceeding 2 ins. in places. Thunderstorms were rather frequent, but as a rule of no great intensity. That of the evening of the 8th was very severe in the Thames Valley, the accompanying rainfall being exceedingly variable, ranging upwards from merely nominal amounts to as much as 2 ins. Many parts of England and Wales were visited by thunderstorms on the 13th, with hail and sleet in several localities, snow at Salisbury. Fog was rather frequent on the south-western coasts and at Deerness. For the month as a whole pressure, temperature, and bright sunshine were below, and rainfall generally above the normal; and the winds varied greatly in direction. Earthquake shocks were felt at Fort William on the evening of the 7th, and, according to newspaper reports, at Guernsey on the afternoons of the 8th and 14th. Destructive earthquakes had previously visited San Francisco, Peru, Formosa, &c., and there had been great volcanic eruptions of Vesuvius and Hekla.

Pressure.—*Mean at 8 a.m.* ranged from 29·90 ins. at Jersey to 29·79 ins. at Blacksod Point and Nairn, the central space of a shallow low pressure area extending from the north-west of Ireland to the north-east of Scotland, and to this extent differing from the usual distribution. The values were in all cases below the average*, by 0·10 in. at Sumburgh Head and Jersey, and 0·17 in. at Blacksod Point. *Highest* values were 30·29 ins. at Jersey on the 4th, and 30·26 ins. on the 29th; 30·25 ins. at Blacksod Point on the 13th, and at Stornoway on the 14th. *Lowest* readings were 29·20 ins. at Malin Head on the 2nd, 29·36 ins. at Aberdeen on the 16th, and 29·35 ins. at Stornoway on the 31st. *Range* consequently was unusually small, from an inch at Blacksod Point and Malin Head, to 0·6 in. at Liverpool and Pembroke.

Depressions.—The disturbances were numerous but shallow, most of them having their centres beyond the western and northern coasts and beyond the North Sea.

Anticyclones.—Although our weather was on several occasions under the influence of high pressure systems the centres of all these were situated well outside the country, either on the Continent, between Spain and Scandinavia, or out on the ocean to the westward or northward.

Winds.—The results were in accordance with the mean distribution of pressure, North-Easterly breezes were the most frequent in the north-west and north, Southerly or South-Westerly elsewhere, but the distribution between the several points of the compass was more uniform than usual. Gale force was felt on 5 days at Deerness, and on 3 days at Laudale.

Temperature.—*Mean at sea level* ranged from above 53° at several stations in the south of England to below 45° in the Orkneys and below 44° in the Shetlands. The actual values were below the average* except at various stations in eastern England, the deficiency being considerably more than 3° in north-western Scotland. *Highest* readings occurred on very varied dates, but mainly about the 8th in England—77° at Southampton and 76° at Epsom and Maidenhead—the 13th in Scotland and Ireland—73° at Dumfries, 71° at Waterford, and 68° at Cally. *Lowest* values were also registered on numerous dates, mostly in the first half of the month, 23° at Balmoral (11th), 24° at Garforth (2nd), 25° at Llangammarch Wells (1st) and Lairg (2nd), and below the freezing point at many other stations. *Range* amounted to 50° at Maidenhead, 49° at Wokingham, and exceeded 40° in numerous other localities in England, Scotland and Ireland, but at Sumburgh Head it was 18°, and at Scilly only 16°. *Vapour Pressure* ranged from 0·35 in. at Lincoln (9 a.m.) and Westminster (6 p.m.) to 0·24 in. at Sumburgh Head and Wick (8 a.m.). *Relative Humidity* ranged from 93 per cent. at Malin Head (8 a.m.) and 92 at Dunmow (9 p.m.) to 73 at Dublin, Trinity College, (9 a.m.) and Yarmouth (6 p.m.). *Mean Earth Temperature* at 1 ft. depth ranged from 54° at Plymouth to 47° at Birmingham; and at 4 ft. depth from 50° at Bath to 45° at Birmingham, Garforth and Sheffield.

Rainfall.—Except at a few stations in the eastern half of England the rainfall was in excess of the average*, by more than 3 ins. at some stations, and by as much as 5·5 ins. at Alnwick Castle, where the month's aggregate total was 7·7 ins., while Port Talbot returned 7·2 ins., Marchmont 7·1 ins., and many other places 5 ins. and upwards. The smallest totals were 1·2 in. at Bawtry, Fulbeck, Rothamsted and Wisley, and 0·9 in. at Spurn Head. In a heavy rainstorm over the north of England on the 19th many places received over an inch, 2·2 ins. at Seaham, 2·4 ins. at Alnwick Castle, and 2·5 ins. at Shields. There was also a fall of 2·5 ins. at Port Talbot on the 5th, but there were few other instances of more than an inch in a day. Precipitation was measured on 30 days at Lairg, 27 at Crathes, and ranging down thence to 8 at Westminster and 7 at Southend-on-Sea.

Bright Sunshine.—Almost without an exception the bright sunshine records were below the average*, by from 2 to more than 3 hours per day at a large number of places, the greatest loss being 103 hours at Cronkbourne and 115 hours at Stonyhurst. The percentage of possible duration ranged from 14 at Bettws-y-Coed and Fort Augustus to 45 at Ramsgate and 46 at Broadstairs.

Observations in the Upper Air.—Kite observations were obtained on the 3rd (3), 6th, 20th, 23rd, 24th, 25th, 27th, 28th (2) and 31st. On the 24th, at Oxshott, temperature fell 16° in an ascent of 1,460 ft., being at the rate of more than 1° per 100 ft.

---

* The averages employed are—*Pressure*, *Temperature* and *Rainfall* for the 35 years 1871–1905; and *Bright Sunshine* for the 25 years 1881–1905. The values will appear in Appendix III. to the Weekly Weather Report for 1906.

400. 6/06. Wy. & S. 4945r.