

# MONTHLY WEATHER REPORT.

OCTOBER 1884.

## SECTION I.

### GENERAL SUMMARY FOR THE MONTH.

THE weather during October was fair on the whole. In most places it was dry, but over the extreme north-western parts of the kingdom showers were frequent and the rainfall in excess of the average. On our extreme south-eastern coasts, a heavy local fall on the 10th brought up the amounts measured to more than their average values, but in other respects those regions were dry. Pressure was in excess of the mean; the winds were more Westerly than usual, and at times blew hard, as some large depressions passed over our area. Temperature differed very little from the average, being slightly low, except in Scotland, and its range was small for the time of year. Bright sunshine was deficient except perhaps at the Channel stations.

October 1-3.—The conditions prevalent during this interval were of a complex character—chiefly of the south-westerly and southerly types—pressure being, on the whole, highest at the Continental stations, and lowest to the northward and north-westward of the British Islands. It was during this period that depression No. LV.\* advanced in a north-easterly direction outside our extreme western and north-western coasts, and, as it did so, developed a well marked “hollow” over the North Sea. Under these circumstances, the wind at our own stations, after backing to the Southward as the depression approached us, veered to West and North-west as it travelled away to the north-eastward. Temperature fell greatly as the wind shifted to West and North-west, and on the 2nd showers of rain fell pretty generally. The North-westerly wind subsequently spread to the eastern shores of the North Sea.

October 4-7.—The barometer now rose generally, and anticyclonic conditions became established over the United Kingdom. The system (No. XX., p. 102) advanced from the south-westward immediately in the rear of depression No. LV., bringing with it the fine, dry, cool, but somewhat hazy weather usual with anticyclones at this time of year. The wind after veering to North-west, lulled very generally, and as the centre passed north-eastward over our Islands, drew into north-east at the southern stations, while it was very light and variable from the westward, or calm, in the north. By the 6th the system had undergone great modification in form, its central area then assuming the form of a long band (or crest) of high pressure stretching in a west-south-west to east-north-east direction across the northern parts of the British Islands, the German Ocean, the south of Norway and Sweden, and the Baltic to Russia, while there were some indications of a small and very shallow depression over Belgium, the northerly gradients of which produced a temporary freshening of the wind at our most eastern stations during the following night, accompanied by showers, while fair weather prevailed elsewhere.

October 8-12.—The distribution of pressure and wind now became very complex. The crest referred to above gave way suddenly during the night of the 7th, and by the morning of

\* See Section II. and Map 2 Plate XXI. for the history and tracks of depressions.

the 8th a large arm of low pressure was formed extending from north-north-west to south-south-east over the British Islands, North Sea, France, and Germany, separating a large high-pressure area over the Atlantic from another over the Baltic and Russia. Into this hollow depression No. LVI.\* advanced from the north-north-westward, bringing about a period of strong cold North-westerly and Northerly winds and gales over Ireland, accompanied by cold rain, while South-westerly and South-easterly winds were felt over Great Britain, with milder weather. At 6 p.m. on the 8th its centre lay very near to Malin Head, and by 8 a.m. on the 9th it had reached the mouth of the Bristol Channel (see the Daily and Weekly Weather Reports for this date). The depression now moved eastwards, and as it did so the Northerly gales spread over Great Britain, bringing with them sharp squalls of cold rain and sleet or snow to almost all parts of the country, the fall being exceptionally heavy on our extreme south-eastern coasts. At 8 a.m. on the 10th the centre of the disturbance lay between the coasts of Norfolk and Holland, and a new shallow depression had appeared over the west of Norway. The latter moved slowly and irregularly to the southward, while the one near Holland travelled slowly to the north-north-eastward, the two subsequently coalescing a little to the westward of the Danish coast, and then travelling away to the Baltic. North-westerly gales or strong winds and cold showers continued to prevail over our Islands, while Southerly breezes were felt on the eastern shores of the North Sea, but the former moderated slowly as the centre of the disturbance passed away to the north-eastward and the sky cleared over our Islands, while the latter lulled and veered to North-west.

October 13-19.—The distribution of pressure now became more simple, and of a north-westerly type, pressure being continuously high over the Bay of Biscay and low to the northward and north-eastward of our Islands. Temperature was rather low throughout, but on some occasions the days were warm, and the air dry; slight showers fell from time to time, more particularly over the western and northern parts of the kingdom, but over England the amount of bright sunshine was considerable. Two depressions appeared within our area during this time, viz., Nos. LVII.\* and LVIII.\* The first of these approached Norway from the westward on the 15th, and, moving south-eastwards, passed away to the Baltic next day. The second reached the Norwegian coast on the morning of the 17th, and its south-easterly motion being unusually rapid, it had passed out of our area by the evening and disappeared over Russia. In each case the centre was at so great a distance from our Islands that its effects were confined to a temporary freshening of the wind at our more northern and north-western stations, accompanied by some showers of rain. A third depression reached the neighbourhood of the north-west coast on the 19th, but instead of moving south-eastwards, travelled away to the north-westward without being at any time sufficiently near to our Islands for its track to be at all accurately made out or for its characteristics to be tabulated with the other cyclonic systems on pages 100 and 101. (See the maps in the Weekly Weather Report, p. 167.)

October 20-23.—The high-pressure area, which had been lying to the southward of our Islands for so many days, now moved eastwards, and travelled over France and our southern counties to Germany (see Anticyclonic System, No. XXI., p. 102), and as it did so the wind fell light over the United Kingdom and backed round to South-west and South, while that in France drew into East and South-east. The weather was very fine, but cool, and fog or haze prevailed in several places. On the 22nd the conditions were anticyclonic and of a southerly type, but on the 23rd a cyclonic tendency was observed in the west, where the barometer fell fast, and the Southerly wind rose to the force of a gale, while it remained light in the East.

October 24-25.—A sudden but very temporary change now took place. The barometer remained high in the east, but an abrupt recovery of pressure in the far west caused the Southerly gale there to lull very quickly, and brought about the formation of a second (but apparently small) high-pressure area off our western coasts. The appearance presented by the chart for 8 a.m. on the 24th was consequently somewhat complex. (See Weekly Weather

\* See Section II. and Map 2 Plate XXI. for the history and tracks of depressions.

Report, p. 170, and the Daily Weather Reports for 23rd and 24th.) A large high-pressure area lay to the eastward of the North Sea, and a small one off the west of Ireland, the two being united by a short col which lay over our Islands. Both to the southward and the northward of this col there was a shallow low-pressure area. Thus, while the winds in Ireland were Northerly, those over France and England were South-easterly, and those in Scotland Southerly and South-westerly. Temperature was rather low but uniform, and, except at the most northern and north-western of our stations, the weather was dry. These conditions did not last long, for on the 25th pressure began to give way, most in the north, and the small western system moved first to the south-eastward and then to the southward and disappeared from our area.

October 26–31.—A decided alteration now took place. The barometer continued to fall fast in the north, the change spread southwards with rapidity, and conditions of a south-westerly type were established over our Islands and their neighbourhood. During the first portion of the period the type was cyclonic and complicated, and two depressions (Nos. LIX.\* and LX.\*) advanced towards the northern part of our area from the westward. The first was very large and deep, and its gradients were very steep; at 8 a.m. on the 26th its centre lay between the Shetland Islands and Christiansund, and although the value for its lowest pressure cannot be quoted, the barometer at Sumburgh Head then stood at 28·3 inches, and there can be little doubt that it had been still lower during the night. Gales from between South-west and North-west were felt very generally, but although the weather was showery in all parts of the kingdom, the amount of rainfall was not large except at some northern stations. As this disturbance moved off the second one (No. LX.\*) advanced, and although it was neither so large nor so deep as its predecessor, its track lay a good deal further south and its motion was very rapid. A renewal of Westerly to North-westerly gales was therefore brought about all over the kingdom, accompanied by squally showery weather, but they were of brief duration. In the rear of this system the barometer rose rapidly, and the month closed with South-westerly winds of considerable strength, the gradients being steep and the system large, but very free from complication. Temperature rose and the weather became dry at all but our most western and northern stations.

\* See Section II. and Map 2 Plate XXI. for the history and tracks of depressions.