

MONTHLY WEATHER REPORT.

JANUARY 1886.

SECTION I.

GENERAL SUMMARY FOR THE MONTH.

THE weather of January was of a most unsettled character. Pressure was below its normal value, and its changes were frequent and sudden. Depressions were numerous and their movements as erratic as those observed in October 1885. The winds varied greatly, both in force and direction, and temperature was low for the time of year, especially in Ireland. Frost occurred frequently, but was not very continuous, the chief feature being the suddenness with which it appeared and disappeared as the North-westerly and South-westerly currents of wind prevailed alternately. Precipitation (consisting largely of snow and hail) was in excess, except on some parts of our west and south-west coasts, and the number of rainy days was large everywhere. Although much gloomy weather and fog prevailed locally in London, the percentage of bright sunshine registered over England generally was largely in excess of the ordinary amount for January, while in Scotland and Ireland there was a slight deficit.

January 1-4.—The distribution of pressure during this period was cyclonic over our Islands, and anticyclonic in France; the gradients were somewhat steep, and were favourable for South-westerly and Westerly winds. The winds reported were therefore strong and squally, the weather showery and changeable, but the air was mild. Under the influence of the depressions Nos. I.* and II.,* the wind occasionally increased to a gale at the north-western and northern stations, and showers of rain fell in most places. This was by far the warmest part of the month, but towards its close the rainfall increased, showers of sleet and snow began to take the place of those of rain previously experienced, and the thermometer fell decidedly.

January 5-14.—The distribution of pressure now changed materially, the type of gradient became very variable, but was favourable for winds from a more Northerly quarter than those hitherto experienced. Cyclonic and anticyclonic conditions prevailed alternately, depressions began to move from the north-westward, and to pass over various parts of our area. Two well-marked systems (Nos. II.* and III.*) on arriving off our northern coasts, moved south-eastwards, one over Scandinavia, and the other over the North Sea, while a smaller system (No. IIA.*) came in from the westward over the south of Ireland, and caused Easterly and North-easterly winds, with a great deal of snow over the southern and south-western parts of the kingdom. On reaching north Devonshire the centre moved abruptly to the southward, and at the mouth of the Channel it took a still further turn, and passing south-westwards disappeared from our area. Frost was prevalent at times, and a great deal of sleet, hail, and snow fell at intervals. On the morning of the 8th the thermometer fell to between 6° and 11° over the eastern and south Midland counties, and a hard frost occurred very generally. After January 10 large depressions again moved north-eastwards outside our extreme northern coasts, and as they advanced towards us the wind drew into South-west and the temperature rose; each system, however, was accompanied by a

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

long subsidiary hollow, which stretched southwards over the United Kingdom and the North Sea, and as it passed eastwards the wind veered quickly from the Southward to the Northward, and the weather changed from a mild southerly to a cold northerly type. (See cyclonic systems Nos. IV. and V.*) On one occasion a well-marked subsidiary depression (No. VA.*) was developed in the "hollow" over the North Sea, and travelling south-eastwards, broke up over Holland on the 14th.

January 15-17.—Conditions now became much quieter for a day or two. Pressure remained highest over France and lowest to the northward of the United Kingdom, and the gradients were steep, so that rather strong South-westerly winds and showery weather prevailed very generally. At first the air was somewhat mild, and the showers consisted of rain, but during the 15th the thermometer began to fall decidedly in the west, and hail and sleet were mingled with the rain. It is worthy of note that this decided change occurred without any material alteration in the direction of the wind, and the cold soon spread all over our Islands. On the evening of the 16th a new depression (No. VI.*) appeared off the west of Scotland, and moving north-eastwards, reached the west of Norway by 8 a.m. on the 17th, where it subsequently dispersed. At 6 p.m. on the 17th barometric readings varied from nearly 29·9 inches over the southern parts of France, to about 28·8 inches off our northern coasts; over northern Europe readings were higher. A remarkable change then took place, as will be seen in the next paragraph, and the distribution of pressure became very complex.

January 18-27.—On the 18th a large irregular "hollow" was developed over Great Britain and the North Sea, so that rather strong squally winds from between North and North-west prevailed on our western coasts, with showers of snow and hail, while cold Southerly winds were blowing on the eastern shores of the North Sea, and variable light breezes over England and Scotland. In this hollow two small minima (Nos. VII. and VIII.*) appeared, while a third showed itself for a time near the mouth of the Elbe. The barometer then rose decidedly over northern Europe and in the extreme west and north of our Islands, and the hollow referred to above was thus formed into a large irregular area of low pressure which lay over the United Kingdom on the morning of the 19th; this will be seen on referring to the charts in the Daily and the Weekly Weather Reports for that date. Strong Northerly gales were felt in the far west, and variable winds elsewhere, while squalls of snow occurred in many places, and the weather was very dull, cold, and raw. The whole of this large area now moved southwards; some of the local minima disappeared, by filling up, while others showed themselves over France and the Bay of Biscay, and gradients for Easterly winds spread steadily over the country. The weather then became still colder everywhere, and showers of sleet and snow continued to fall in many places. At 8 a.m. on the 21st pressure varied from about 30 inches over the north of Sweden and 29·8 inches at Stornoway to about 29·3 inches over France and the Channel. A new depression (No. IX.*) had advanced westwards, from Germany to our south-eastern coasts, while a second, very shallow, one lay near Rochefort. The latter moved away to the southwards, while the former travelled south-westwards to the neighbourhood of Fécamp, and filled up. This left a very shallow and irregularly-formed low-pressure area over France, while the barometer rose steadily over the northern parts of our area. Early on the 23rd, however, another small cyclonic system (No. X.*) arrived off our south-eastern coasts from Germany, whence it moved slowly to the westward, and, reaching Devonshire by the evening of the 24th, dispersed. At 8 a.m. on the 25th (pressure being still highest in the north) the general low-pressure system lay over the Bay of Biscay. It was an ill-defined shallow area, and underwent very little change till the evening of the 26th, when a small, but clearly well-marked minimum (No. XI.*) approached Brittany from the south-westward, and moving north-eastwards, reached Jersey, and produced very heavy snow over the south-west and west of England, with slighter falls elsewhere, after which it broke up

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

suddenly. The irregularly-formed low-pressure area then began to move slowly to the northward, up our western coasts, undergoing many modifications of form as it did so, while other shallow local minima appeared from time to time within its bounds. As it advanced the wind shifted very temporarily to South-west over our southern and eastern counties on the 26th, but remained strong from East in the north. On the 27th the low-pressure system had broken up, and (pressure being still high over northern Europe) a new set of conditions set in.

January 28.—The distribution of pressure on this day was transitional. The barometer fell decidedly in the west, Southerly winds began to set in over Ireland, and the thermometer rose fast—first at our western and subsequently at our eastern stations.

January 29–31.—Pressure now increased in the south-west, while it gave way a little over northern Europe, and the gradients over the United Kingdom changed to those favourable for South-westerly winds. Two large depressions appeared in our neighbourhood, one of which (No. XII.*) passed along to the north-eastwards, outside our extreme northern coasts, but developed a large hollow over our Islands and the North Sea, very similar to, but shorter than, those noticed under similar circumstances earlier in the month.

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