

MONTHLY WEATHER REPORT.

JANUARY 1885.

SECTION I.

GENERAL SUMMARY FOR THE MONTH.

THE weather during this month exhibited no features of great importance. Five different periods are noticeable, some of them cyclonic and others anticyclonic. With the former the depressions observed were, as a rule, unimportant, but those of the 10th and 11th were deep and complex, their gales severe, and their weather very bad. Temperature has been, on the whole, below the mean, especially over Scotland and the central parts of England. The winds have been chiefly Southerly, but variable; over our south-eastern counties and the Channel, however, there was a large admixture of winds from South-east and East. The amount of cloud has been large over Great Britain, where bright sunshine has consequently been very deficient, but the clouds were chiefly anticyclonic, and the rainfall has consequently been decidedly short of the average. At the close of the month, however, squally, showery, mild weather seemed to have become established.

January 1-3.—During this interval the distribution of pressure was chiefly anticyclonic, and the type southerly to south-easterly. The gradients were slight over the North Sea and England, moderate to rather steep in the west. Thus, while light to moderate Southerly and South-easterly breezes were prevalent over Great Britain, the wind in the west was fresh to strong, and on one occasion (the 2nd) rose to a fresh gale from South-east in Ireland and at the mouth of St. George's Channel. Rain fell at the western stations, where also the air was mild, but over England the weather remained cold, dry, and very gloomy—in continuation of the conditions which ruled in that region throughout the latter part of the previous month.

January 4-9.—A change now took place; anticyclonic conditions became prevalent over France, and occasionally over our southern counties also, while cyclonic systems passed along our north-western coasts from time to time, and spread more or less over the kingdom. South-westerly winds were consequently general, occasionally rising to the force of a strong breeze or slight gale in the west and north, accompanied by showery weather, but in the south the weather, as a rule, remained dry and very gloomy, the intervals of clear sky, on the one hand, and of rain, on the other, being very temporary. Temperature, however, rose decidedly over England. While the main depressions referred to above passed along over our north-western coasts, some shallow subsidiary disturbances travelled occasionally across our more southern districts, and it was with these that the showers in the south were experienced.

January 10-12.—The weather of these days was transitional from the south-westerly to the north-easterly type, and was marked by the advent of a storm of great severity and complexity. On the 10th (pressure being then as high as 30.1 inches and upwards over the southern half of France, and lowest to the north-westward of our Islands) a well-marked and deep depression (No. I.*) arrived off the west of Scotland from the Atlantic. Its motion was apparently easterly, but slow, and as it approached Scotland southerly to south-easterly breezes were experienced over that country, the Shetlands and the Hebrides, while south-westerly to westerly gales set in over Ireland and England; the weather was showery and squally, but mild (see the Daily and Weekly Reports for this date). During the morning the fall of the barometer became much more rapid on our north-east coasts than appeared to be warranted by the depth of the system or the rate of advance of its centre, and subsequently an arm (or "hollow") of low pressure was formed, extending south-eastwards from the central area of the system to the North Sea. The wind in Scotland lulled to a calm for the time, while that over England veered more to the westward, and increased to a fresh or strong gale very generally, with much rain. During the night of the 10th-11th, a new, well-marked disturbance (No. IA.*) was formed over the North Sea, in the hollow referred to above, and, uniting with the main system, produced a complex disturbance, which travelled eastwards across the North Sea. The wind drew rapidly round to the northward on our coasts, temperature fell, heavy squalls of snow, hail, and cold rain spread over the country, and thunderstorms occurred in several parts of the kingdom. In the rear of this disturbance the barometer rose rapidly and continuously, and a decided change took place in the distribution of pressure over north-western Europe.

January 13-24.—During this period the dominant weather system over north-western Europe was anticyclonic, but the type of distribution varied from easterly between the 13th and 18th, to south-easterly and southerly between the 19th and 24th. The easterly type was produced by a rapid and continued increase of pressure in the west and north, immediately in the rear of the depression last mentioned, and remained in force, with little variation, for six days. During this interval no depression of any importance appeared over the British Islands, but on the 15th a second high pressure area appeared over northern Europe and became united to that off our north-western coasts by means of a band of high pressure (or "col"), as will be seen on referring to the maps in the Weekly Weather Report for this date. On the 16th the north-western high-pressure area gave way, and the south-easterly period became established, pressure being highest over northern Europe, and lowest over the Bay of Biscay, with somewhat decided gradients. Throughout the entire period temperature was low, especially over Great Britain, and easterly (north-east to south-east) breezes prevailed, blowing freshly to strongly at first, but moderating subsequently; these were accompanied by a large amount of cloud and haze, and by occasional showers of sleet and hail in places. In many parts of the Continent the frost was very severe, but over the United Kingdom it was, as a rule, moderate, and the daily range of temperature was slight.

January 25-31.—Pressure now gave way generally, most in the west, and a southerly to south-westerly type of pressure-distribution became prevalent, cyclonic over our Islands, and anticyclonic over the Channel and France. Temperature rose generally, the winds veered, and depressions began to appear in the west and north-west. The first was shallow and unimportant; it arrived off the north-west of Ireland early on the 27th, and some very shallow subsidiary disturbances connected with it spread inland, causing the showery weather which accompanied it to spread to all parts of the kingdom. On the centre reaching Scotland, however, the system dispersed, and a new and deeper one (No. II.*) advanced rapidly to the north-west of Ireland early on the 28th. Its appearance at first was

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

threatening, but on its centre reaching the west of Scotland, it, too, dispersed, so that its gales were confined to our western stations though its rain was experienced very generally. Other systems, apparently shallow, skirted our extreme western coasts on the 29th and 30th, and on the morning of the 31st a large, but not very deep one, (No. III.,*) reached our extreme south-western stations, and moving in about the direction of the broken line marked "B," developed a "hollow" and a subsidiary system off the west of Scotland in the evening. (See the 8 a.m. and 6 p.m. maps for the 31st in the Weekly Weather Report.)

The month closed with a continuance of the south-westerly type of pressure-distribution, and mild showery weather.

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