

MONTHLY WEATHER REPORT.

MAY 1886.

SECTION I.

GENERAL SUMMARY FOR THE MONTH.

THE weather of May was at first fine, bright and dry; sometimes warm during the day, but cold at night. After the 8th, however, it became most unseasonable, and was marked by rainfall of unusual amount over England and Ireland (especially between the 11th and 14th), by frequent thunderstorms, especially in the south of our Islands and over France, as well as by constant changes in the type of pressure distribution, and consequently in the direction and force of the wind. Depressions were numerous, but not deep, and on several occasions two or more minima appeared simultaneously near their centres. The amount of rainfall was largely in excess of the mean, except in the extreme north and extreme south of our Islands, as much as three or four times the normal quantity for May having occurred at some of our west Midland stations. The amount of bright sunshine recorded was small.

May 1-7.—The distribution of pressure over the British Islands during this period was anticyclonic, owing to the existence of a well-formed anticyclone (No. IX.), which first appeared off our north-western coasts on April 29, and, after moving southwards for one day, travelled slowly to the eastward and became a large and lasting system over the eastern shores of the North Sea. The weather was fine, dry, and bright, except at some of our northern and western stations, where showers of rain fell occasionally, as the South-easterly to South-westerly winds freshened. As the centre of the anticyclone passed over, the wind fell to a calm, temperature became low, especially on the nights of April 30 and May 1, when sharp frosts occurred over the inland parts of our Islands. Then, as the gradients for Southerly (South-east to South-west) winds spread over us, the thermometer rose, especially during the daytime, so that whereas on May 2 the maximum readings over Ireland and England varied from only 50° to 55° , those recorded on the 4th exceeded 65° in many places, and those on the 7th rose to between 72° and 77° over England. No depression of importance appeared over our area during this interval.

May 8-10.—The anticyclone in the east now dispersed, and a new one (No. X.) appeared in the north. The distribution of pressure consequently became rather complex, and a shallow depression (No. XXXV.*) advanced northwards from Spain to the north of France. The wind became variable, the sky assumed a very unsettled appearance, halos and auroræ were reported locally, showers became more general, and thunderstorms occurred on the Continent. Temperature gave way decidedly, especially during the day-time.

May 11-15.—This was one of the wettest and most unsettled periods which have been experienced at this season for many years. At 8 a.m. on the 11th pressure was, as a whole, highest over the Mediterranean and southern Europe, while anticyclone No. X. lay off our northern coasts. Small shallow, depressions then began to appear over various parts of our Islands and the north of France, but the disturbance referred to in the previous

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

paragraph broke up. One of the new systems (No. XXXVI.*) advanced over the western parts of our area from the north-westward, and underwent such sudden modifications in form that it is impossible to identify it with certainty with the system which lay off the south of Ireland early on the 12th. Depression No. XXXVI. was followed by an Easterly wind, and this increased in force, and brought exceedingly heavy rains to the north-east of Ireland, which extended to the eastern parts of that country. On the morning of the 12th a well-marked, but apparently decreasing system lay a little to the southward of Cape Clear, whence it moved eastwards to Gloucestershire and disappeared. In the course of the ensuing 24 hours several other small minima appeared in the "valley" of low pressure which, lying over our southern counties, the Channel, and north of France, separated the anticyclone in the north from the larger one in the far south. The weather occasioned by this very complex distribution was unusually wet, especially over the north and west midland counties of England. In some places the fall continued for 60 hours, and amounts were reported varying from one to three inches in 24 hours. Floods of exceptional height were observed in the neighbourhoods referred to, and the amount of damage done by them was very serious. It was on the night of the 12th also that a severe tornado occurred over central Spain, doing much harm at Madrid, and similar, but less violent phenomena occurred locally in some parts of Germany. During the 13th some of the minima over the British Islands filled up, but two of them began to travel, one (No. XXXVII.*) taking a northerly course up our east coast, while the other (No. XXXVIII.*) moved eastwards towards Belgium, and afterwards filled up. In France much rain fell from time to time and thunderstorms occurred in many places, but the rainfall with the Westerly and South-westerly winds over the Continent was not nearly so great as that which occurred with the Easterly winds over Ireland and England. The temperature of the air in the north was lower by several degrees than that in the south, so that as the two baric minima just referred to moved on—one to the northward and the other to the eastward—the cold Northerly wind of their western sides was spread all over the kingdom on the 13th, bringing with it strong squalls and cold showers to the southern stations. The fall consisted of a mixture of rain, hail, and sleet, which subsequently gave way to drier weather, and a sharp night frost occurred at the inland stations. During the 14th the barometer rose generally, and, as the depressions passed away the wind backed round to North-west and West, with improving weather, and the thermometer rose somewhat.

This system of disturbed weather was very extensive; the trough of low-pressure in which it occurred lying at times over the whole of south-western Europe, the North Sea, North Germany, and the Baltic Provinces of Russia.

May 16-18.—The type of pressure distribution had now become south-westerly, and the gradients moderate; during its continuance a depression (No. XXXIX.*) appeared in the north-west, and, travelling north-eastwards, produced South-westerly (South to West) winds, moderate to strong in force, with showery weather, but mild air. At 8 a.m. on the 17th, however, a cyclonic system (No. XL.*), both larger and deeper than those recently observed, arrived off the west of Ireland, bringing with it Southerly (South-east to South-west) gales and rains, which were felt almost all over the kingdom. On reaching the north of Scotland, the disturbance proved to have a double-minimum, and as this passed out of our area to the northward, it apparently filled up.

May 19-21.—The barometer then rose very decidedly, and while some tendency towards the formation of a new anticyclonic system was shown over Ireland (see 8 a.m. and 6 p.m. reports of the 19th) the barometer fell over the Bay of Biscay, and a new but not deep depression (No. XLI.*) advanced over Great Britain from the south-westward. At 8 a.m. on the 20th its centre was between Scilly and Penzance, and this system also, as it moved northwards, developed several small minima within its central area (see 6 p.m. map of 20th), causing very sudden changes of wind, pressure, and temperature; thunderstorms occurred in places, and in the immediate neighbourhood of its centre a great deal of rain fell, but in

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

more remote localities the rainfall appears to have been singularly small, and at several stations there was none at all.

May 22-23.—The distribution of pressure during this interval was mainly anticyclonic (see the maps in the Daily and Weekly Reports and system No. XI. p. 56), and the weather was consequently dry for a little while in most parts of the British Isles. Over France, however, severe thunderstorms and rain were very prevalent, and these at times spread northward to our extreme southern and south-eastern counties, accompanied by shallow depressions; one of these occurred in London early on the 22nd). Conditions were therefore still unsettled, and during the night of the 23rd the anticyclone broke up.

May 24-29.—The distribution of pressure during this interval was cyclonic—the systems being at first very large, shallow, and ill defined, but afterwards smaller, deeper, and well-marked (See No. XLII.*). The winds consequently varied greatly both in force and direction. Temperature was low and variable, and while rain fell from day to day in all parts of the kingdom, the fall was at times very heavy locally (especially in London on the 24th), and thunderstorms occurred at times over our southern stations and very frequently over France. With the 29th, however, a decided improvement took place and the barometer rose.

May 30-31.—The dominant pressure system during this time was anticyclonic; the winds consequently fell light, and the weather cleared up. Temperature, however, did not rise much even during the daytime, and the nights were cold and unseasonable. The month closed without any indications of warm settled weather.

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