METEOROLOGY OF 1854.

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NO. VII.*

IN saying that the meteorology of the past year was extraordinary, I am only repeating what has already been testified to by the returns of the Registrar-General, the reports of Mr. Glaisher, and the observations of Mr. Lowe of Highfield. I shall bring into one view the remarks of these gentlemen, coupled with some observations of my own.

About the 11th of December, 1853, a severe frost with a fall of snow set in, and continued till the 6th of January, 1854. It began with a fog so dense, that in Manchester and London some loss of life was occasioned by it. The 2nd and 3rd of January were said to be the coldest days on record for the last eighty-five years; it was 6° below zero, Fahrenheit. But the snow was not so deep this year as in 1814, when the degree of cold was less. The most remarkable phenomenon was, that the frost was ushered in and dismissed by a bright aurora borealis, which was observed at Pembroke, Dec. 7th, and at Tonbridge Wells, Jan. 3rd. The temperature of the whole year was about 1° below the average, although certain parts of the year were unseasonably warm. Thus, immediately after the cessation of the severe frost just mentioned, the temperature rose 7° or 8° above the average, and continued in excess for the rest of that month. It was more or less in excess up to the middle of April. In the month of May, icebergs were met with by vessels in their passage between Liverpool and Boston. The summer was cool; June and July were mostly below the average. For a few days in the middle of June, the temperature increased greatly, and the 24th of that month was said to be the hottest day that had ever occurred since 1818, and the 25th the hottest since 1814; the temperature being 84°, 89°, Fahrenheit, whereas in the two former years it was not higher than 79°. From August to the end of October, the temperature was almost always in excess. But November was cold, and so was the beginning of December, which, however became warmer than usual, and remained so till the end of the year. Nevertheless the temperature of the entire year was 1° below the average.

Three earthquakes were reported during this year. The first was felt as a smart shock at Kingston, in Jamaica, on the 1st of April. The second was a more terrible one at San Salvador, on the night of the 16th of the same month. The city was shaken and damaged, causing some loss of life and great alarm. The preceding day had been hot and tranquil. It was on the 15th, the day preceding this earthquake, that the ship *Powhatan* was wrecked and lost with all her crew and passengers in a violent tempest that broke upon the coast of North America, near Barnegat. The storm and the earthquake were separated from each other by the opposite hemispheres, but their parallels of longitude almost correspond. The third earthquake took place at Nice, on the 29th of December, and was felt as far as Marseilles, Cannes, Brignolles, and along the shores of the Mediterranean. It was preceded by a calm, copper-coloured clouds, and a peculiarly dark appearance of the sea.

A hazy atmosphere was frequent, occasionally interrupted with a singularly translucent state of sky, most remarkable for the nearness it produced in the sight of distant objects, and their distortion by the mirage, which was very discernible in looking at ships at sea, or the Isle of Wight, as

* My meteorological observations have been objected to on account of my barometer not being a standard one. To meet these objections, I purchased one the same as those used at the Royal Observatory, and by Mr. Glaisher. I find my old cheap one at 10s. 6d. tallies exactly with my new and more expensive one, at several guineas cost. In future, I will quote its elevation and depression in *numerals*. The cistern is 200 feet above the sea level, according to the last Ordnance Survey, which was taken both in the rear and front of my house. My private records have hitherto very nearly corresponded with the quotations of the astronomer royal's at the Greenwich Observatory; but his elevation is only forty feet lower than mine, which is about the twelfth of an inch, and is therefore scarcely appreciable. I thought it proper to make this statement, as it seemed to me to be nothing more than what is due to the credit of the *JOURNAL* and my own veracity. In future, I shall also record the amount of rain falling, which has not hitherto been quoted in this town; at least, as far as I know of.—J. A. H.

seen from hence. Many nights in the autumn were beautifully clear and starlight; there were forty-two cloudless nights in March, April, and September; and the fine days must have amounted to more than one-third of the year. But the chief characteristic was fog, particularly in the forenoons of July, August, and September, which were the gloomy months of sickness and death.

Among other phenomena was that of a comet on the border of Pisces, near the star α Andromedæ, March 29th. Its course was north-west by west.

Most of the year was a solemn calm. The sun rose and set in a pale amber-coloured light, or in the midst of gilded strati. The graceful white cirri of summer were seldom visible; the grey strati of the morning dispersed reluctantly as the sun ascended, and reformed themselves as soon as he declined. A transparent net-work of clouds collected at noon. The prevailing winds were from the north, north-west, east, and south-east; but the force of the wind was small. There was no hail;* thunder storms and the sheet lightning of summer were rare; rain fell sparingly; the vegetation suffered in proportion. The deficiency in the amount of rain falling is said to be about twelve inches, the average being somewhere about twenty-four. The 14th September was a very wet night, which was the night of the allied forces landing in the Crimea; and the 14th of November was stormy, which was the fatal day of the tremendous gale in which so many of our transports were lost in the Black Sea. These two circumstances show the universality of the operations of nature. Gales of wind from the north-west and north-east occurred in the course of the autumn, of which, however, the equinox was calm.

With very few exceptions the mortality was in excess throughout the year. Upwards of 26,000 persons perished from the cholera in the space of less than three months, within the bills of mortality alone; while other diseases of a fatal character contributed to swell the number of deaths above the ordinary ratio. The year was a sickly one all over the world. Animal and vegetable life suffered severely; and the horrors of war have been added to those of pestilence and deteriorated food. An abundant harvest scarcely compensated for the deficiencies of the previous season and the unusual exigencies of the times. Many trees, shrubs, and evergreens were killed by the frost in January, while others were unable to survive the dry weather that followed.

The history of the barometer is soon told. It was obstinately stationary at 30 inches. Mr. Lowe says, "it was very high in February, March, and April, reaching in March 30.928 inches, when reduced to the sea level. In January it descended to 29.982 inches at the sea level, giving a range of pressure in two months of nearly two inches."

Brighton, February 1855.

NOTES AND OBSERVATIONS ON SOME OF THE MORE REMEDIABLE CASES OF DEAFNESS.

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NO. IV.

THE case which follows resembles in many respects the one last reported. Though long, it is given *in extenso*, because it illustrates many points of practical importance, to which allusion will be made in the comments which follow the case.

CASE VIII. *Fætid Purulent Discharge from both Ears, of ten years' duration; Deafness; Occasional Tinnitus, but no Earache; Frequent attacks of Catarrh, with increase of Deafness; Entire loss of both Tympanic Membranes, and all the Ossicula in the Left Ear, with probable Necrosis of*

* Hail fell at Brighton on the 15th and 20th November, but it was slight. There were no thunderstorms throughout the year, which is unusual in this locality. Ozone is said to have been abundant in December.