

rence with those pursuits which are essential to our welfare, and which are manifestly designed to exercise our industry and skill. In respect to all the inferior animals we may accept of the decision of the poet :

If man's convenience,  
Or health or safety interfere, his rights  
Are paramount and must extinguish theirs.  
Else they are all, the meanest things that are,  
As free to live and to enjoy that life  
As God was free to form them at the first,  
Who in His sovereign wisdom made them all.

Let me conclude with one word as to the pleasure to be derived from the study of Natural History in connection with a country life. What pursuit can we name in which the charms of beauty, variety, and the exercise of various mental faculties are so united? What can we imagine so well calculated to enliven our interests in the scenes of nature, to make each changing season only a change in our pleasures, and to connect the ordinary occupations, and even the sports of rural life with observations and inquiries full of entertainment as well as usefulness.

**The Late Remarkable Weather in England.**

At the last meeting of the British Meteorological Society, January 24, a paper was read, "On the Meteorology of the Past Quarter, in connection with the Fall of Snow at the beginning of the Year," by James Glaisher, Esq., F. R. S. In commencement, Mr. Glaisher spoke of the value of association as afforded by the society, to the members of which he was chiefly indebted for the observations upon which his paper was based. The different elements of investigation were treated singly, that the bearing of each upon the other might be clearly shown. "For," observed Mr. Glaisher, "the correctness of the accepted truism that in nature no phenomena is isolated was never better illustrated than at a time when the readings of the barometer and thermometer, the dense fogs, the heavy snow, and the pertinacious east wind formed a combination—one scarcely more abnormal in its departure from the average than the rest."

In October, between Jersey and lat. 51°, the mean temperature declined 4°; between lat. 51° and 53°, there was no difference. In November, south of lat. 51° and north of lat. 53° it declined about 6°; but between these parallels to 9°, forming a band of cold the greatest that was experienced, and which held its ground during the long period of two months. Fog was one of the most remarkable features during the quarter. In November fogs frequently enveloped the whole country at one time, and were of great density. They chiefly occupied the band of cold between lat. 51° and 53° before mentioned.

The first fall of snow took place in the neighbourhood of Chester, in November. After Dec. 15, it fell at nearly every place; but more frequently between lat. 51° and 53° than elsewhere. On December 15 it was, in many places, as deep as six inches. On the following day, the temperature as registered at Manchester, was as low as 6°, but the maximum cold for the season took place on the night common to Dec. 28 and 29. This cold extended as far as our meteorological stations, from Jersey to Arbroath, in the North of Scotland. The extreme severity of Jan. 3rd was not at all felt south of the parallel of Uckfield, in Sussex. About London and its vicinity the reading of the thermometer fell early in the morning to 10°, 11°, 12° and 13°. It had reached the low points at one o'clock in the morning, and did not rise above them till eight o'clock. It was most severely felt in the Midland Counties, where the reading was as low as zero. By Mr. Lowe it was estimated at 4°, this is the lowest reading observed by any one—it was lower, than any in the immediate neighbourhood.

A number of original communications from various observers were read by Mr. Glaisher, on the fall of snow on January 3, which was generally distributed over the country, but lay deepest between the parallels of latitude occupied by the fog and extreme cold. In parts of Cornwall there was none or very little; whilst at Holkham, on the Norfolk coast it was 18 inches on the level. At Whitehaven there was scarcely an inch; but at Liverpool, and other places in the same parallel 6, 10, and 14 inches fell. The north was, in parts comparatively clear; and in parts of Northumberland no snow at all fell on the day of the great and general fall. There had been much snow previously, and it then lay on the ground to the depth of several feet. The drifts over England and Wales varied from 3 feet to 10, 12, and 15 feet. They were very deep at Derby and at Grantam, and upon the Norfolk coast.

In conclusion, as connected with the severity of the weather as falling beneath his own observation, Mr. Glaisher remarked that trees were sheathed over with ice for some days, till Jan. 4, when it began to crack, and fall to the ground. Beneath a row of trees in the immediate vicinity of his house it was literally strown with large fragments, each retaining the curvature of the branch it originally encased. Animals, ordinarily exposed on Blackheath, suffered severely, and two were observed frozen to death; also birds, which had fallen dead from the trees, were picked up in the immediate neighbourhood. The number of crystallised flakes mingled with the snow was another indication of the low temperature under which it had been formed. Mr. Glaisher laid before the meeting a number of photographic copies of several he had himself observed on January 1 of the present year.

At the conclusion of the paper, J. C. Whitbread, Esq., rose and commented upon the value of the paper, and the elaborate nature of the work. A vote of thanks was moved to Mr. Glaisher, and unanimously carried. The meeting was numerously attended.

**The Iron Trade.**

The number of iron furnaces in Scotland on Dec. 31, 1853, was in blast, 114; out of blast, 29; total 143. The stock in hand at the 31st December, 1852, amounted to ..... 450,000 tons. The production during 1852 was equal to ..... 710,000 "

Total.....1,160,000 "

The home demand in founderies and malleable works in 1853 was ..... 300,000 tons. The exports ..... 650,000 "

950,000

Stock on hand at the close of December last ..... 210,000 "

The reduction of stock is thus 240,000 tons on the transactions of the year; and another season of similar business would entirely sweep it away. The average price of pig iron during the year has been 61s., and the value of the manufacture has therefore been £2,165,000. The average price of bar iron has been 187s.; and if the Scotch makers had turned their pigs into that class of iron, the value would have been £6,638,500. The average prices of bar and pig iron for the last nine years are appended:—

	Bars.	Pigs.
	s.	s.
1845	190	80
1846	195	67
1847	165	65
1848	110	44
1849	117	45
1850	109	44
1851	107	40
1852	210	45
1853	187	61

Bar iron does not invariably follow the rise or fall of pigs, and the great fluctuations in price are more severely felt in the crude than in the finished production. This fact should induce the Glasgow capitalists to manufacture a greater quantity of bars and castings, and sell less of their iron in the first step from ore.

The iron produced in Great Britain is now equal to three millions of tons. In pigs, as Scotch bring lower prices than Staffordshire or Welsh, the total present value is not less than ten and a half millions sterling. In its manufactured form into bars the value must be twenty-eight millions. The value of the metals produced at present within the island is quite fifty millions—a larger sum than was ever formerly extracted from any land in the metallic business. A calculation of the value, with the additions in the cutlery, edge-tool, engineering, and hardware trade, would bring up the aggregate to one hundred millions for 1853.