

has been experienced than we find recorded at the same period in any year as far back as 1789.

A portion of the following table was given on a former occasion; but as it will be useful for comparative reference, we now give it complete for the 12 months.

Table of the Monthly Mean Barometer, Mean Barometer, Mean, and Maximum of Temperature, and the amount of Rain in 1860, compared with the average.

Month	1860.		Average.		1860.		Average.	
	Mean	Max.	Mean	Max.	Mean	Max.	Mean	Max.
January	30.00	34.00	30.00	34.00	30.00	34.00	30.00	34.00
February	29.90	33.50	29.90	33.50	29.90	33.50	29.90	33.50
March	30.00	34.00	30.00	34.00	30.00	34.00	30.00	34.00
April	30.10	34.50	30.10	34.50	30.10	34.50	30.10	34.50
May	30.20	35.00	30.20	35.00	30.20	35.00	30.20	35.00
June	30.30	35.50	30.30	35.50	30.30	35.50	30.30	35.50
July	30.40	36.00	30.40	36.00	30.40	36.00	30.40	36.00
August	30.50	36.50	30.50	36.50	30.50	36.50	30.50	36.50
September	30.60	37.00	30.60	37.00	30.60	37.00	30.60	37.00
October	30.70	37.50	30.70	37.50	30.70	37.50	30.70	37.50
November	30.80	38.00	30.80	38.00	30.80	38.00	30.80	38.00
December	30.90	38.50	30.90	38.50	30.90	38.50	30.90	38.50
Yearly	30.00	34.00	30.00	34.00	30.00	34.00	30.00	34.00

Although January was comparatively mild for the season, yet, owing to the coldness of the summer months, the mean temperature of the year, 46.50, was lower than any since 1789, at least. In 1858, nearly as cold, there was a severe winter, but a warm summer compared with the last.

December.—The mean temperature of the preceding month had a tendency to reach the average; but in the present the mean again fell back, owing not so much to the coldness of the days as to a general low temperature at night, but without any great extreme. The lowest 39°, occurred on the nights of the 2d and 3d. East and north-east winds prevailed for 21 days; it was only between the 14th and 22d that it blew from other quarters, and in two days of that period it came from N.W. It rained more or less on 14 days, and more than half an inch fell on the 14th; the total amount was 2.90 inches, being nearly half an inch above the average. The ground temperature at 1 foot deep was about 1° higher than usual; at 2 feet it was nearly as much below the average.

December.—Neither the general low temperature of this month, nor the extreme minimum has been equalled in any corresponding month in this century. The mean was only 5°.48 above the freezing point, or 34°.45, while the extreme lowest was 1° below zero, or at 11° Fahrenheit. In December 1858 and 1859 it was as low as 7°, in 1856, 9°, and in 1850, 10°; and these are the lowest temperatures we find recorded as having occurred in the neighbourhood of London in any December for the last 60 years. Previous to this unusual degree of cold, the wind was from the north for six consecutive days, and so day from N.E., notwithstanding which the barometer was very high; but soon after it suddenly rose fully an inch. The amount of rain and melting snow was above the average. The mean temperature of the ground at 1 foot deep was 44°, and at 2 feet 43° 38'; the former being 1° 94 above the mean and the latter 0° 17 below; the instruments at both depths

indicated 38° on the last day of the month. During the intense frost the ground was covered with about 4 inches of snow, which doubtless prevented the frost from penetrating much below the surface. The severe period commenced on the 17th. The following are the minima:—Dec. 17th, 20°; 18th, 15°; 19th, 10°; 20th, 23°; 21st, 38°; 22d, 17°; 23d, 12°; 24th, 4°; 25th, 18°; 26th, 17°; 27th, 24°; 28th, —1°; 29th, 20th, 17°.

The lowest temperature that occurred between sunrise of the day, and the same time next morning.

In the neighbourhood of London the annual depth of rain-fall on the average of 34 years is 23.578 inches. In the past year the total depth, 30.08 inches, is therefore 6½ inches more than the usual quantity. But it was wanted; for trees in the previous seasons were suffering from dryness at the root. A well in which the water maintains the same level as that of the subterranean bed of water in the gravel in which the well is sunk, was 8 feet 11 inches below the surface of the ground in the autumn of 1859. On the 31st of December 1859, the surface of the water in the same well was nearly 4 feet 6 inches from the top, being a rise of 4 feet 7 inches. The underground reservoirs are now amply replenished; but it is doubtful whether rain that went down in quest of moisture when this was low, will not become diseased where the water has risen to surround them constantly.

The past year has been remarkable for the frequency of strong gales and violent hurricanes. One of the latter, on the 27th and 28th of February, proved very destructive on the west coast. It then swept across the centre of England, tearing up trees containing from 100 to 400 feet of timber. In the principal parts of Nottinghamshire, more than 30,000 trees were blown down. At Aton Park, Donnington, an Ash tree was torn up which measured 41 feet in circumference near the base. A Cedar of Lebanon, in Hertfordshire, 100 years old, with 60 feet of straight stem, was uprooted, carrying with it several tons of earth. Again, on the 3d of October, a tremendous hurricane commenced in the Hebrides, sweeping such crops as were above ground on St. Kilda, completely into the sea; traversing Scotland, tons of thousands of trees, even whole plantations, were laid uniformly prostrate, as ordinary winds, with wet, will lay a field of grain.

We have now presented our readers with the principal characteristics of the year just-ended, in hope that the efforts of a recurrence of such vicissitudes may be guarded against as far as possible. We previously remarked that had it not been for improved cultivation and drainage, the past must have proved a most disastrous season. There is still much room for further improvement, producing, consequently, still more beneficial results, to the country and to individuals. In rain and at the same time cold seasons, for, as in 1850, the two generally go together, the urgent necessity of thorough drainage, both surface and underground, is sufficiently apparent. The means of surface drainage should be at command when required; and by deepening the soil where it is too thin, and rendering it permeable to water with deep under-drainings to prevent stagnation, most of the summer rain that fills our fields is by way through the soil, rendering it comparatively warm. But where under-drainage is neglected, the accumulated moisture stagnates on the already saturated soil, cold in consequence of the winter rains or melted snow having never been drawn off; that moisture from its coldness is heavier than the warmer summer rains; the latter may run off by the surface, and thus their weight be on the soil; but, by their cannot displace the colder and heavier water, which consequently retains possession of the soil for the greater part of the growing season, and in that case the crops cannot thrive as they otherwise would, and are, besides, rendered late, so that in bad seasons they are in danger of being lost.

A SHORT discussion having taken place in our columns respecting the proper termination of modern surnames when Latinized for the purpose of BOTANICAL NOMENCLATURE, we have thought the question worth a little investigation. A correspondent objects to Latinizing such names as Hooker, Douglas, or Darwin by Hookeria, Douglasia, and Darwinia, and contends that Hooker, G., Douglas, G., and Darwin, G.—*gen. i.* To the another correspondent replies that the proper manner of Latinizing names is to add *us*—*gen. i.* when the name ends in a consonant, and *ii*—*gen. ii.* when the name ends

with a vowel; as was recommended by the British Association for the Advancement of Science in 1842. A third rejoins that an adherence to this rule would lead to intolerable words, such as Lobbi, Lobbi, Patis, Patisi, Douglasii, Darwinii, &c. and that euphony is the only safe guide. Our second correspondent, P. G. E., replies that as we understand the rule for Latinizing proper names, the termination *ii* is not a substantial *i* for, and may be added to a terminal vowel; thus Darwinus would make Darwinii, *gen. ii.* Darwinii, &c. Terminal *y* should be treated as a consonant and retained; e.g., Lindley, Lindleyus, Lindleyi. In proper names ending with a consonant the termination *us*, *gen. i.* is added; thus Lobbi would make Lobbius, *gen. i.* Lobbi; Becker, Beckerus, *gen. i.* Beckeri; and to his ear these terminations sound quite as harmonious as Lobbi and Beckeri. If euphony is to be considered "the only safe guide," he thinks a glance at our scientific nomenclature will show how little individual taste is to be trusted. Take for instance Abidinensis, Forbesensis, Agassizensis, &c. &c. &c. If therefore names could be generally adopted it would be most desirable, for we must remember that names once correctly given must be tolerated.

In the last remark we must all agree; but there is little probability of uniformity being secured unless by showing what the practice was of Latinizing barbarous names when Latin was a living tongue. Upon this point we have been favoured with the following remarks by a very learned Latin scholar:—

"As the Roman surnames or those which belonged to all the members of a family ended without exception in *ius*, I can have no hesitation in preferring this termination whenever we Latinize English surnames. Theoretically such Latin surnames in the outset probably had not patronymics, that is, signified the "son of—" just as Johnson, Dixon, Williamson, &c. &c. or what is more in harmony with the Latin surnames, Jones (as John's), Williams (William's), Fletcher (step-Richard). I say more in harmony because the Latin surnames (nomina gentilia) were strictly only gentives (with *us* understood). Thus Suetonius was probably at first only the gentive of Sueton, Quintus the gen. of Quintus, Tullius of Tullus, like the familiar gentives *utrus, illicus*, and still more like the poetical gentives *utrus, illicus*.

These observations seem hardly confirmed by reference to well-known Latin proper names; the great majority indeed end in *ius*, as Ostorius, Petilius, Petronius, Vitellius, Manlius, Targinius, &c. &c. But on the other hand we find such names as Sabinus, Petalus, Serranus, Manuvelus, Iremenus, Gamarus, Gamaranus, and the like. To say nothing of Græculus. It seems to have been usual with Low Latin writers to reject the terminal *us* and adopt *us*. Thus in the old Latin Characters we find *Beatus* for *Beau*, *Britannus* for *Britann*, *Bohannus* for *Bohan*, *Kenullus* for *Kenul*, *Sabinus* for *Sueyus*, *Græculus* for *Uret*. Perhaps for Turus we should say *Tur* for *Turus*. Upon the whole then it would appear that either termination, *us* or *ii*, *gen. i.* or *ii*, is allowable, but that *us* is that which was used in the best period of living Latin. We should be glad, however, to hear more of the opinions of Scholars upon this point.

NOTE ON THE ACHENIA OF FUMILIO ARGYROLEPTIS.

MR. JAMES DUNSMITH sent us a packet of seeds of the plant *Stipa Spica River*, with the following description:—"The achenia of several small ones were blown about by the wind till a shower of rain fell, when they attach themselves by a gummy matter to the soil by their lower end, at the same time setting themselves perfectly upright. They ornament every a barren spot in this country throughout the dry season, and are very common and even when the ground is flooded by the thunder-storms."

The achenia of the *Fumilio* are singularly-shaped bodies, the *perys* (pappus) consists generally of nine scales or sepals, expanded like a flower, with each sepal beautifully ornamented by branching lines; the lower part, including the seed, is best described as a small oval, with eight or nine angles, and somewhat resembles a lamp glass in shape. The upper side or instead of this leaf is smooth, but the toe and the side, which is about 1-25th of an inch in length, is covered (see Fig. 2) with from 30 to 4000 hooked little blades. Each bladder is oval and 1-500th of an inch in length, and a few of the structures were branched, enclosing a hard ball of dry mucus or matter which becomes adhesive when moistened. The sole of the achenia's pitted when the blades are attached

* Extremum of year.
† Total depth of rain for the year.

