

England, if sensibly conducted and properly understood, has no rival in the affections of those who are able to appreciate its pleasures. Why is it that after these spells of country life, these great draughts of exercise, these trappings through the turnips, and this being brought face to face with nature in the calm evening of the year, that men, usually so stiff and reserved, come back to the club with the roughness rubbed off them, ready to converse, glad to be amused, eating with appetite, and taking their pleasure rationally, telling their adventures with relish, and going to the play with the light heart of Colonel Newcome! Because they have to a certain extent been humanized by the daily round of a country-house existence, and have learned to value the refining influence of the society of their mothers and sisters, their wives and children, and of many more good women whose presence can but be acknowledged in crowded ball-rooms or fashionable assemblies of a London season. Add to country-house life, with its merriment and music, its excursions and rides, its shooting and theatricals, the genial charm of fine weather, and may be much of the sorrow of the commencement of the year will be forgotten and forgiven at its close.

Thermometer Pantaloon.

Hoffenstein was busily engaged scolding Herman for not publishing a lot of cheap jewellery there was in the show case, when a stoop-shouldered countryman entered and inquired—"Have you got any good jeans pants here?" "Certainly, my friend," replied Hoffenstein, "we make a specialty of goods in dot line, and we defy competition. If we sell anything and you don't like it you gets your money back or somedding else in exchange, you know. Vee you a farmer?" "Yes, sir, I live up on Red River." "Vell, den, you need a pair of bants like dese," said Hoffenstein, pulling out a sky-blue pair from a pile of clothing on the counter; "dey vas de generine doeskin, and vil last de whole year oud, you know." The countryman took the pantaloon to the light, examined the texture of cloth, and then shaking his head knowingly said: "There's too much cotton in them; they will shrink." "Of course, my friend, dey vil shrink, but wait and I tells you somedding. If a man vat owns a bank or keeps a store comes here, I don't sell him dem kind of bants. Vy? Because they vas made expressly for de farming business. Dey vas de dermometer bants, and a blessing to every farmer vat wears a pair of dem. Do you know my friend, these bants vill dell you exactly vat the vedder vill be. Ven it vas going to be vet und cold dese bants vill begin to shrink up, and ven it vas going to be dry und warm dey comes right down, you know. Dree years ago I sell a pair of dem to a man vat vas name Vikins, und efer since den he makes good crops ven de oder people don't make noding, because he always knows by his dermometer bants vat de vedder vill be. After a vile de people in de neighborhood finds oud dese degred ut Vikins' success, und at de beginning uf zeeding, you know, dey comes for dirty miles around und uf de see Vikins bants crawling up his legs dey holds off und waits for a change, but in his bants was down dey goes right back home, and put in de crop. Dink uf it, my friend. Mid de dermometer bants you can dell exactly ven to but in cabbage seed und wheat dwice as better as mit any almanac, besides ven de vedder gets so cold und vet dot de bants goes under your arms, you can sew buttons on de front und wear dem as a vest." When Hoffenstein finished his yarn concerning the pantaloon the countryman smiled, and turning abruptly on his heel, left the store. "Did you see de voy dot man acted, Herman?" said Hoffenstein, angrily. "Yes, sir," replied the clerk. "Vell, it shust shows dot de more you try to help some peoples along, de more you don't get any thanks for it."

Sun Spots and Rain-fall.

(From Commercial, Cin., O.)

A theory largely accepted by scientists, that there is a close relation between sunspots and rainfall, is reinforced by meteorological observations in different parts of the world. The theory has been briefly stated as follows: In those years in which the number of spots on the sun's disc exceeds the average annual number the amount of rainfall exceeds the average annual amount, and *vice versa*. The statistics of India in this regard have proved to be particularly valuable. In other parts of Asia but little information has been obtained for or against the theory. In China, where so many accurate and interesting records have been kept for many centuries concerning other subjects of great value to science, but little attention has been paid to minute details of meteorology. Foreigners, however, residing in that country have of late years accumulated considerable information upon that subject. Mr. Alex. Hosie, M.A., of the British Legation at Peking, has recently prepared and published tables showing the connection of sun-spots and rainfall in that city from 1843 to 1877.

Mr. Hosie, who is a pains-taking and scholarly gentleman, in explanation of his tables says: In the second, third and fourth columns of table No. 1, Wolfe's relative sun-spot numbers are so arranged that the years of maximum sun-spot fall in the sixth year; the result of which is that three cycles are formed from 1843 to 1877, both inclusive. In the fifth column the means of the three cycles are taken, and in the sixth column will be found a mean cycle of eleven years, which has been arrived at in the following manner: Of the thirteen means obtained from the three cycles above referred to, the mean of the first and third means, and of this mean and the second mean, forms the first year of the mean cycle of eleven years. The mean of the second and fourth means, and of this mean and the third mean, forms the second year of the cycle, and so on.

At p. 564 of *Nature*, for September 26, 1878, Mr. Meldrum thus expresses it. "The first term of what is called the 'mean cycle' is obtained from the expression $at+b+c$, where a , b , c , are the means of the sun-spots for the first, second and third years of the thirteen years, the remaining terms being obtained in a similar manner." The same plan has been followed in the construction of Table 2. The seventh column of either table shows the deviations from the mean value of the sun-spots and rainfall, respectively, for the mean cycles of eleven years. These mean cycles have been formed with a view to reducing the effects of what are called "accidental irregularities." The falls for the years 1856 '59 and 1862 are lacking.

TABLE 1.

Wolf's Sun-spot Numbers.

[Maximum years in the sixth line.]

Year.	1843-1855	1855-1867	1867-1877	Means.	Mean Cycle	Variation.	Year of Cycle
1	13.1	7.1	31.4	14	15.8	40.3	1
2	19.3	11.1	14.7	13.0	15.8	29.3	2
3	26.6	20.1	26.8	20.8	23.4	23.6	3
4	27.4	24.2	28.6	26.7	26.3	23.3	4
5	24.9	24.2	31.8	27.1	26.6	23.3	5
6	25.4	24.2	31.8	27.1	26.6	23.3	6
7	23.6	21.0	29.1	24.6	23.6	23.3	7
8	23.6	21.0	29.1	24.6	23.6	23.3	8
9	23.6	21.0	29.1	24.6	23.6	23.3	9
10	23.6	21.0	29.1	24.6	23.6	23.3	10
11	23.6	21.0	29.1	24.6	23.6	23.3	11
12	23.6	21.0	29.1	24.6	23.6	23.3	12
13	23.6	21.0	29.1	24.6	23.6	23.3	13

TABLE II.

Peking Rainfall, 1843 to 1877.

Year.	1843-1855	1855-1867	1867-1877	Means	Mean Cycle	Variation.	Year of Cycle
1	26.0	24.0	15.5	21.8	21.8	1.1	1
2	24.7	11	10.0	17.3	21.8	4.5	2
3	31.9	11	15.2	22.3	21.8	0.5	3
4	23.8	11	15.2	17.8	21.8	4.0	4
5	19.6	11	16.0	15.2	21.8	6.6	5
6	31.4	18.2	30.1	26.5	21.8	4.7	6
7	29.8	21.5	44.0	31.4	21.8	9.6	7
8	23.6	21.5	30.0	28.0	21.8	6.2	8
9	22.5	25.7	30.0	29.0	21.8	7.2	9
10	23.9	30.0	25.5	26.1	21.8	4.3	10
11	23.9	15.5	17.0	18.8	21.8	3.0	11
12	23.9	15.5	17.0	18.8	21.8	3.0	12
13	21.0	15.2	19.3	18.5	21.8	3.3	13

"From a comparison of the seventh columns of Tables I and II we find that—

"(1) The number and nature of the deviations from the means are precisely the same in both.

"(2) The maximum rainfall year immediately follows the maximum sun-spot year.

"This 'lagging behind' of the rainfall is not peculiar to the maximum year, but will be found to pervade the whole cycle, for if the maximum rainfall year, *i. e.*, the sixth year of the mean cycle, is moved up so as to coincide with the maximum sun-spot year, or fifth year of the mean cycle, the variations of the sun-spots and rainfall will coincide in every particular; that is to say, years of maximum sun-spots will be years of maximum rainfall, and *vice versa*, and the variations will be found, in maximum years at least, to increase and decrease in almost the same ratio.

"It will be remarked that from the sixth to the eleventh years of the mean rainfall cycle, or from the maximum to the minimum rainfall years, the gradations are well marked, and it will be seen that the statistics from which this part of the cycle is derived are all but complete."

During the month of August the highest temperature at Cincinnati was 80° on the 6th, the lowest 58.3° on the 11th. The prevailing wind was southeast. The were 7 clear and 13 fair days, and rain fell on fifteen days. The summer, now virtually ended, has upon the whole been a pleasant one, and the following figures show its record in respect to temperature and rainfall as compared with past years:

	June		July		August.	
	Tem.	Rain	Tem.	Rain	Tem.	Rain
1871.	77.1	3.81	77.1	2.78	79.4	6.05
1872.	77.7	3.81	79.3	7.01	78.1	2.21
1873.	77.3	3.58	78.3	3.94	75.8	4.60
1874.	79.0	2.63	83.4	3.42	77.9	1.63
1875.	77.5	4.83	79.7	6.69	77.2	3.17
1876.	78.3	6.53	79.6	6.91	76.5	7.38
1877.	75.0	5.24	77.2	4.25	74.5	2.26
1878.	74.0	5.03	80.6	4.32	77.5	4.11
1879.	73.1	5.22	81.3	2.75	72.6	11.72
1880.	74.2	9.96	76.6	2.46	76.2	4.01
1881.	73.4	7.82	80.8	3.12	73.5	5.76
1882.	73.0	4.34	74.4	2.91	74.3	5.73

This gives a general average temperature at Cincinnati of 74.3° for the month of June, 78.4 for July, and 76° for August.

Harnessing the Wind.

We don't mean to say that any one can literally harness the steeds of the wind, but we would tell our readers that Vennor fully describes their course and the state of the weather for the coming year. The Vennor Calendar for 1883 is a valuable book, and will be sent by A. Vogeler & Co., Baltimore, Md., who control it, to any address, upon receipt of 10cts.

The qualities we possess never make us so ridiculous as those we pretend to have.