6. Great falls of the barometer are generally accompanied in our latitude by a temperature above the mean for the season, and great rises by a temperature below the mean; the latter being generally attended by northerly winds, and the former by southerly.

7. After violent storms of wind, when the barometer has been very low, it usually rises very rapidly.

8. The greatest variations in barometric range occur between latitude 35° and 55°, being the seat of variable winds, the risings and fallings decreasing from the above latitudes both towards the equator and the poles, at which places the barometric ranges scarcely reach half an inch, while within the seat of variable winds, the range is about three inches.

9. In very hot weather, a sudden fall of the barometer generally precedes thunder. Other minor particulars relative to the action of the barometer I shall be happy to give to B. P. W., should he require it.

Communications, 62, Beresford Street, Walworth, will greatly oblige

W. H. White.

Gold of Pleasure.—Every body is aware that the Rev. Mr. Gwilt has devoted himself, with the most earnest perseverance, to the growth of the "Gold of Pleasure." At the Waltham Agricultural Show, the Duke of Rutland concluded his speech by observing—He was sorry to have detained the meeting so long, but before he concluded, he begged to inquire whether any of them had seen any thing of the "Gold of Pleasure," or the "Golden Delight?" The meeting having answered in the negative, his grace said it is a new introduction, and will obviate the necessity of going abroad for oil-cake. I have a letter from an excellent farmer (Lord Howe), who gives me the best accounts of it. The land must be well ploughed and harrowed, so as to get the soil very fine, as if for flax or barley. It is then to be drilled at the rate of 10lbs. per acre, and the plant to be cut when it assumes a rich golden colour. It succeeds on any, but especially on light land. I have obtained some seed, and intend to try it; in fact, I look upon my farm as a sort of experimental one (cheers). If I succeed, then the benefit of my experience is at the service of my neighbours; and if I fail, I wish alone to be at the expense (loud cheers). The progress in the growth of the "Gold of Pleasure" must be very gratifying to the Rev. Mr. Gwilt.—*Suffolk Chronicle.*

Turnpike Roads and Railroads.—There are 30,000 miles of turnpike roads in the country, and there are, at present, only 6,000 miles of railway. It is quite evident, therefore, that in the making of lines which are wanted, and for which bills will undoubtedly be obtained, there will be employment for the people, on the very lowest calculation, for the next ten years. What a glorious prospect for us is this! We are at peace with all the world, and likely to be so; and at home we shall have a thriving and flourishing population, fully employed, and as a necessary consequence, well fed, well housed, and well clothed. In the meantime, it is quite true that some may lose. Those more desperate speculators who regard the whole theory as a system of gambling, and who throw desperately for large stakes, may lose money—may be ruined; but, as in this world we cannot have unmixed good—the storm that purifies the elements often destroys property to a large amount—so we must regard the ruin which wild and hazardous speculators bring upon themselves as an evil incidental to the system, rather than inseparable from it, but which, even in its most aggravated form, will be greatly counterbalanced by the amount of good which will be done to all classes of the community, and in the vast addition which must by this means necessarily be made to the wealth, the power, and the general prosperity of the country.—*Advertiser.*

Peas v. Potatoes.—In consequence of the elaborate paper of Dr. Buckland, in which he gives the palm to the pea, and smashes the potato all to atoms, we have determined to try a few experiments with the two vegetables. Like Brummell, we "once ate a pea:" but, not remembering to have derived any particular energy from the morsel, we were disposed to give the preference to that vegetable with which, in his hand, Sir Walter Raleigh has gone down to posterity. A day or two ago we swallowed six peas, but we did not receive such an accession of fibre and muscle as Dr. Buckland had induced us to believe that we should have done. We ran up and down stairs to try the experiment, but soon grew fatigued. The next day we dined upon a potato, which gave us considerable energy; but our legs were rather stiff, which may be accounted for by the quantity of the starch which the potato is known to contain. We have read Dr. Buckland's, paper very attentively, and have weighed his assertion as to the nursery couplet being a proof of the popularity of peas in the fifteenth century. We, however, do not take the same view that he does of the distich, for if there was "Peas-pudding in the pot nine days old," it is clear that our forefathers and foremothers were not very fond of it. As to a feed of beans, which Dr. Buckland recommends, we have not tried it, for we are not quite such monkeys as to think of doing so. Dr. Buckland tells us that the woman of Tutbury lived a long time by sucking the starch out of her pocket handkerchief. We cannot bring ourselves to try the experiment, or we would some day make a dinner of our shirt collar, which has more starch in it than the woman of Tutbury's pocket-handerchief. On the whole, after weighing peas, pocket-handerchiefs, beans, collars, and potatoes, we are inclined to give our verdict in favour of the latter.—*Punch.*

How to Look Young.—How is it that some men thought to be so old, still look so young; whilst others known to be so young, must still look old? The cause lies frequently within themselves. Mr. Rant, once, on being asked the secret, said, "I never ride when I can walk; I never eat but one dish at dinner; and never get drunk. My walking keeps my blood in circulation; my simple diet prevents indigestion, and never touching ardent spirits my liver never fears being eaten up alive." But he forgot to add one of the greatest causes of all of lasting youth: "a kind unenvious heart." Envy, believe me, can dig as deeply in a human face as time itself.

Great Russian Railway.—The longest tract of railway ever contemplated in Europe, is that from St. Petersburg to Odessa, extending over an uninterrupted line of 1,600 miles. It will connect the Baltic and the Black, and consequently the Caspian Seas, traversing three different zones of temperature; and a person may then leave the Russian capital in the depth of winter, and arrive on the same rail at Odessa, in warm, nay hot weather. It is, moreover the beginning of what may really be termed an overland rout; connecting in fine, the Russian metropolis and Ispahan. The Emperor Nicholas takes great interest in this gigantic plan.

Affinity of the Soil for the Saline Particles of Manure.—Your correspondent, "Oxygen," in your paper of the 18th inst., says, "So strong is the affinity of the soil for the saline parts of manure, that water charged with them is soon deprived of its freight," &c. I doubt very much his theory. A few years ago, I manured a field of about 4 acres, at the rate of about 15 cart-loads per acre, I think in the month of November I then plowed it. In about a fortnight after, a quantity of rain fell. The field was partially drained, and the main drain emptied into one which supplied a pond. When the drains began to run, I perceived the water in the pond to be colored, as if a portion of the water from the dung-heap had run into it. I could account for the color in no other way than that the rain carried with it a portion of the manure from the field.

"Oxygen" says, it (water) will escape from the drain as pure as when it fell upon the earth. I would ask him, if the water has the power of carrying with it the colouring matter from the manure, must it not take with it those very soluble salts which manure is said to contain—as soda, potash, ammonia, &c.?—*F. Marston, in Lond. Agricl. Gaz.*

The Chemist can Confer Fertility on a Barren Soil.—The soil, as is well known, owes its origin to the disintegration and decomposition of rocks and minerals, and of the vegetables which have previously grown upon it. Its constitution, therefore, differs in various localities,