

James.—Now, William, I won't bear it. I say the ale is good ale. None of your nonsense.

Wm.—Well, James, read for yourself. If you are pleased to drink beer made out of a pond which is the receptacle of the wash of slaughter-houses and grave yards, and where are thrown all manner of dead beasts, you may; I say,

"Water, pure water, pure water for me."

But every one to his liking, as my Latin book says, *de gustibus non disputandum*.

James.—Well, William, if it is as you say, I'll drink no more cream ale. Let me see the trial.

Wm.—Here it is. Read it through; But mind now, don't take your hand off your stomach, for you will want something to brace you up better than cream ale, before you get through.

The Victory.

SAM AND BOB.

Sam.—Halloa, Bob! where are you going, all dressed up so?
Bob.—Going? why, I am going to the Juvenile Temperance Meeting: come, won't you go?

Sam.—Go! I go to a Temperance Meeting? I should like to see myself in such a place.

Bob.—Why, you need not be in such a rage about it; you could not go to a better place. What's that you have in your mouth?—a segar, as true as I live. Well, you are indeed a fair sample of an embryo gentleman.

Sam.—May be, you don't like it; for my part, I mean to do just as I please: and father says I may go with him to the next trotting match. You know that bay colt father calls mine!—why I've got him so that he can trot a mile in two forty!

Bob.—Well, you are a precious genius, indeed! a perfect specimen of a portion of the rising generation; a regular horse-jockey in perspective. Two forty! what do you mean by two forty?

Sam.—Ha, ha! what a green one you are! Why don't you go to the tavern with your father, as I do, and then you'll learn what it is. The last time I was there I took a smasher? I see father take one, and I guess I've as good a right as he to take one.

Bob.—A smasher! I must confess myself equally at a loss to define smasher, without it means a drink. If it is so, it certainly is a smasher. When a man gets drunk, he certainly is in a smashing condition, and smashes his own windows; falls down and smashes his nose; and after abusing his wife, winds up by smashing the crockery.

Sam.—Oh, but it is only the old rummer that does that; you don't catch this child being an old rummer, I tell you.

Bob.—Recollect Sam, the old rummer was once a boy like you and doubtless thought as little of being a drunkard as you do now. His father perhaps set him the same example as your's does you, and saw his error when too late; and reaped the bitter fruit of his error by seeing his son grow up a drunkard. In many cases, both father and son have become drunkards.

Sam.—Why Bob, you'd make a first rate temperance preacher. There is a good deal of truth, though, in what you say; but it hurries my time some, I tell you.

Bob.—I mean to hurry your time. I want you to join our Society. I think it would gladden your mother's heart, and perhaps influence your father too, as you are an only son, and a great favorite.

Sam.—I tell you what I'll do; I will go home and tell father he may sell the colt, and that I'm determined not to be either a drunkard or a horse-jockey. I recollect the other night my mother asked me to go to a temperance meeting with her; and father swore at her and called her a fool, and told her to let the boy alone; and I saw the tears in her eyes; and she wiped them away with her apron; and sister Jane told me how nice all the little girls were dressed, and how pretty all the boys, Oliver Vail, Abel Conklin, and John Handly, sung. I am off. I'll join. Hurrah!

Root Beer and Temperance Bitters.

A Dialogue between Charles Merrill and William Strobel.

Wm.—Charles, let us take a glass of root beer, they say it's real nice for purifying the blood.

Charles.—Nice for what?

Wm.—To purify our blood.

Charles.—That's medicine, is it not? I hope you don't think I am sick. My blood don't want purifying.

Wm.—O, I suppose that is only said to induce people to drink it.

Charles.—Well, I'll have none of that stuff. Good cold water is the best drink for me. Drink your root beer and Albany ale, and all that stuff, and I guess your blood will want purifying. There is a shop that advertises Temperance bitters; I suppose that is cold water, a pretty bitter drink for these rum-sellers. If I thought that was what they mean I would go and buy some. I would encourage that.

Wm.—Now you are too hard upon these men who want to give us something cool and refreshing. They know that people must have something besides cold cold water. Root beer strengthens the stomach, and temperance bitters sharpen the appetite.

Charles.—Pooh! nonsense, William; depend upon it, it is a contrivance of the old deceiver. I remember a story of the Sandwich Islanders; when they were offered some rum, they would not touch it; some gin, they would not touch that; next they had given them some beer, and were told that would not make drunk come; they looked at it and smelt it, but they said they knew not what was in it; but they knew what was in cold water, and that that could do them no hurt. So I say of your root beer and temperance bitters. I like the old song, "Cold water, cold water for me." So fare you well.

AGRICULTURE.

On the Origin and Assimilation of Nitrogen.

(Continued from page 303.)

Animal manure, in as far as regards the assimilation of nitrogen, acts only by the formation of ammonia. One hundred parts of wheat grown on a soil manured with cow-dung (a manure containing the smallest quantity of nitrogen,) afforded only 11.95 parts of gluten, and 64.34 parts of amylin, or starch; whilst the same quantity, grown on a soil manured with human urine, yielded the maximum of gluten, namely 35.1 per cent. Putrified urine contains nitrogen in the forms of carbonate, phosphate, and lactate of ammonia, and in no other form than that of ammoniacal salts.

"Putrid urine is employed in Flanders as a manure with the best results. During the putrefaction of urine, ammoniacal salts are formed in large quantity, it may be said exclusively: for under the influence of heat and moisture, urea, the most prominent ingredient of the urine, is converted into carbonate of ammonia. The barren soil on the coast of Peru is rendered fertile by means of a manure called *Guano*, which is collected from several islands in the South Sea. It is sufficient to add a small quantity of guano to a soil, which consists only of sand and clay, in order to procure the richest crop of maize. The soil itself does not contain the smallest particle of organic matter, and the manure employed is formed only of *urate, phosphate, oxalate, and carbonate of ammonia*, together with a few earthly salts.

Ammonia, therefore, must have yielded the nitrogen to these plants. Gluten is obtained not only from corn, but also from grapes and other plants; but that extracted from the grapes is called vegetable albumen, although it is identical in composition and properties with the ordinary gluten.

It is ammonia which yields nitrogen to the vegetable albumen, the principal constituent of plants; and it must be ammonia which forms the red and blue colouring matters of flowers. Nitrogen is not presented to wild plants in any other form capable of assimilation. Ammonia, by its transformation furnishes nitric acid to the tobacco plant, sun-flower, *Chenopodium*, and *Boerhaavia officinalis*, when the grow in a soil completely free from nitric. Nitrates are necessary constituents of these plants, which thrive only where ammonia is present in large quantities, and when they are also subject to the influence of the direct rays of the sun, an influence necessary to effect the disengagement within their stem and leaves of the oxygen, which shall unite with the ammonia to form nitric acid.

The solid excrements of animals contain comparatively very little nitrogen, but this could not be otherwise. The food taken by animals supports them only in so far as it offers elements for assimilation to the various organs which they may require for their increase or renewal. Corn, grass, and all plants, without exception, contain azotised substances. The quantity of food