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Music that is not exactly Music.

MR. EDITOR: Not long since, one of your contemporaries contained an essay on Music—semi-serious, semi-comic—which has induced me to "grasp my pen" with a view to enter my protest against one of its recommendations.

The writer of the article in question, deems it highly commendable and proper, that volunteer music should be composed, particularly when emitted by a bevy of love-lorn Adonises, sighing under the (supposed) apartments of "ladies faire," and disburdening over-filled bosoms of some of their superfluous melody, o' nights.

We object, because— 1. Every person—and especially every lady—has a right to choose his or her own music, and is not under obligation to be grateful to every moon-struck or ill-disposed wight who may demand his or her ear.

2. "Night is the time for rest," for quiet, comfort, and repose, with all respectable people; and even music was not intended to be used for "making night hideous," or scaring either the genus homo or canine.

3. Serenaders very often hit upon the most inopportune time possible to display the powers of their own sweet voices, (for such beings always imagine themselves charming singers as well as killingly beautiful in person.) Frequently, rude outbursts of song mar the sacred stillness of the night, to the serious offence and injury of nervous childhood, and irritable old age; and to others suffering from ill health, the turn of a disease is often thus deprived of its proper serenity.

4. Very little of the singing imposed upon the public in this form, would be tolerated in a well instructed juvenile singing-school. Most of those who thus obtrusively thrust themselves upon the public ears are not pleasant singers, and are frequently under the influence of a reckless spirit which renders them fitter subjects for the guard-house than for music-teachers.

The writer plainly hints that such characters should be served as they were said to have been by a lady somewhere—"drop them down a huge pound-cake,iced, and full of plums." The natural connection between the cerebral joy of singing, and munching sweet cake in the dark, betrays at once the juvenility of the writer, and the mixed character of his associations.

Another form of volunteer music, once common, is from a "Callithumpian Band"—a relic of darkness, employed to disturb a sacred scene of enjoyment by rude demerits of ruler gormandizers, who can neither tell or think wherein the fun of the thing consists. Happily, Law has taken them in hand, and they will soon be read of, but never seen.

Another form of volunteer music, which is now in vogue, is that of the street organ-grinder, who plants himself at your window or door, and, whether you are "at home" or absent, ill or well, deaf or dumb, will turn off so many yards of villainous music, while his scowling half-shuts your eyes and grates upon your ears by singing some foreign jargon for which you know little and care less, and who will not move off and dissolve his congress of children and gaping fools, until you have made him a special appropriation from your purse.

The vagabonds!—may the day soon come when these strong-beaty men and women shall be set at work, and no longer infest our streets and haunt our houses! We are hearty lovers of good music, at proper times and places, and are therefore anxious to have all caricatures of the kind we have noticed, abolished. Were we ill-disposed to the divine art, we should wish

it no greater harm than is done by these modes of imposture. We close by repeating, that every person has a right to choose his or her own modes and times for musical entertainments; that "serenading" is no longer (if it ever was) an act of true, commendable gentility; and that few persons, eminent as singers, are eminent or useful in any other capacity. We beg, therefore, that serenaders, callithumpians, and lazzaroni in general, would spare themselves the trouble of forcing so much bad music upon unwilling ears, and are confident that those customs are becoming more and "more honored in the breach than in the observance."

SEVERAL

The following lines will come home with great force to the hearts of bereaved parents—none other can fully understand the depth and poignancy of grief here so touchingly expressed.—Ed. Chron.

MY CHILD.

BY THE LATE MRS. JULIA H. SCOTT, OF FOWLER, S. C. "There is one who has loved me, dear'd from the day: The foot of Spring is on yon blue-topped mountain, Leaving its green prints 'neath each spreading tree; Her mantle is torn by the wailing winds of the West; Her heart is aching for the little child she lov'd— Giving sweet tones to its wild melody. From the warm South she brings unnumbered roses To greet with smiles the eyes of grief and care; Her bosom heaves on the worn brow repose, And her rich gifts are scattered every where— I heed them not, my child! I heed them not, my child!"

In the low vale the snow-white daisy springeth, The golden dandelion by its wanders; The exquisite a daisy fragrance flingeth To the soft breeze that wafts far and wide; The hyacinth and polyanthus tender From their deep hearts, an offering of love, And fresh May pink, and half-blown lilac, tender Their grateful homage to the air above— I heed them not, my child! I heed them not, my child!"

Down the green lane come peals of heart-felt laughter; The school has sent its eldest inmates forth; And now a smaller band comes dancing after, Filling the air with shouts and merry laughter. At the rule gait the anxious dame is bending To catch her eye-darting to her breast; Oh, spring bath! full of treasures in her keeping, And lovely are the landscapes that she views— No so with me, my child! No so with me, my child!"

All the day long I listen to the singing Of the gay birds and wails among the trees; But a sad undertone is ever ringing In my ears, and death has led me here. Nature to me the letters of the Bible reads; The spirit of her charms has pass'd away; A sound of bliss no more my bosom fills— Strangers its aid in strenuous clay— That's in the grave, my child! That's in the grave, my child!"

ORIGINAL NARRATIVE.

Notes of a Seven Months' Journey to and from CALIFORNIA.

BY WM. H. CHAMBERLIN, LEWISBURG.

CONTINUED.

Tuesday, Sep. 24.—Unwell all night. Packed up this morning for the last time, we hope, (until ready to vamose from the diggings,) and continued our journey over a mountainous country. Met a number of Americans and Spaniards, packing from the mines, and passed others on their way thither, heavily laden with provisions, merchandise, &c. Passed a number of dry diggings, at present unworked for want of water; the amount of earth thrown up appeared almost incredible; the bed of almost every ravine and gulch is turned over. About 2 o'clock, we reached the foot of the arroyo, known as Fremont's diggings, and "dropped anchor" in sight of the "promised land," after the lapse of SEVEN MONTHS since leaving home, and an overland journey of Twenty-Six Hundred (2600) miles.

May 24, 1850.—My log-book, or "notes by the way," ended with our journey; but our experience since arriving in the country, and what we have "seen and heard," may prove interesting for future reference—in noting which, I am satisfied that an occasional leisure hour will not be entirely misspent. I can say for our mess, that I never heard a man (save one) regret the adventure, either on the road or since; but have heard scores by the way, almost curse the day that they ventured upon the hazardous and foolhardy enterprise, and had they known what they were obliged to endure, all the gold in California could not have enticed them from home.

Our experience at gold digging, was short and unsuccessful. The day after we arrived at the Mariposa mines, we moved camp to a spot we had selected, upon the point of a rocky bluff, overlooking a large part of the gulch in which digging was going on. Here we "set up stakes," or rather lay down our empty, way-worn packs, beneath the imperfec-

shade of several small oak trees. We had no tent, nor had we slept under cover since leaving Santa Fe. There was no grass in the vicinity, and the Indians were stealing animals every night, and driving them off into the mountains. We concluded to send our mules to Scott's ranch on the Marceides, where we could have them run with a "caballada," upon the range, at \$3 per month each, and no security for their safe keeping. Our first business was to purchase a supply of provisions. There were several stores in the place, some in tents, others in the open air. We found prices to range pretty much as follows: tea \$3; flour 50c per lb.; pork 75; sugar 50; coffee 50; salt 75; saleratus \$8 per lb., &c. This was said to be very cheap, and really was, but at the time, we thought it sank pretty deep into the small remnant of "coined dust" we had brought with us. It cost about \$2 per day to live, and do our own cooking. We were surprised to see how willing merchants were to credit persons coming into the mines with provisions, tools, &c., and also noticed that the miners were not in the habit of paying cash, but settled their bills at the end of the week or month.

Our next step was to take a walk thro' the diggings, see how they did it, what tools were required, and select a spot to commence operations. The first hole that attracted our attention, was at a narrow point in the arroyo, and from the appearance of the rock on either side, a ledge once obstructed the passage of the stream, which is now so low that the water appears only at intervals, and sinks. In this place there were three persons at work. They sunk the hole some 8 or 10 feet deep; one was engaged in hauling out the water, another was scraping up the gravel and sand in the bottom, and the third washed it out in a wooden bowl. We saw him washing out several times, and always had from half an ounce to two ounces. This we thought "first rate luck," but they worked hard for it, and were wet from head to foot. Several persons were working near them, with tolerable success. We went a little farther up the gulch, and stopped to enquire of a man what luck. He was taking out about an ounce per day. Another man was at work opening a new hole; he said that he had worked three weeks in a hole some distance above, and made but a few dollars; if he didn't have better luck this time, he would leave for some other diggings. Further up, we came into the dry diggings. Here the Sonorians were at work, borrowing under ground, and working very slowly and carefully collecting none but the earth containing gold, which they packed off to water upon their heads. The Americans seldom work in the dry diggings. We saw a number of machines at work, with varied success. They consisted of a rocker or cradle, dug out of a pine log, placed in a slanting position, and put in motion by means of a lever. The earth and water is poured into a box at the upper end, passes through a copper or sheet iron sieve, and runs off at the lower end; the gold and some sand settle to the bottom, and is retained by several cross-pieces or shoulders, left on the bottom when dug out.

We soon became satisfied looking at others, and also satisfied that the larger portion of those at work were making but little more than board. We supplied ourselves with the necessary tools, and went to work. Paid \$16 for a crow bar, \$8 for a shovel, &c. Opening a hole in these diggings, was a pretty difficult job. It was not worth while to clear off a large spot, for it would only be by chance that we could find gold at the bottom, and the stone and clay were closely cemented together, making the digging very hard. When we reached the rock, we found that a "knife" was necessary to dig out the crevices, and a "horn spoon" to scrape it up. I tried washing, but when I had all the earth and sand out of the pan, there was no gold in the bottom. I gave that part of the play up in despair, having never washed out a peck. We sunk several holes, all with like ill success. While we were in the mines, the total earnings of three of us was about \$40, and our expenses, \$100.

These mines are 80 miles distant from Stockton, and 180 from San Francisco by land. Col. Fremont holds a claim of 100 square miles, which he purchased of the Spanish Governor of California. This covers the most valuable portion of the Mariposa gold regions. His partner Mr. Godey, had a store here, and a large number of Indians employed at digging. He had discovered a vein of quartz rock said to be rich in ore, and has erected a rude machine for crushing it. From what we could learn, there were about 200 Americans, and as many foreigners and Indians, at work in these diggings. The Americans are mostly from Texas and other Southern States. The entire population appeared orderly and well disposed. The men went about their work leaving camp,

their provisions and money to take care of themselves. It is seldom that punishment is necessary in the mines, but when required, I am told, that Lynch law is immediately put in force, and offenders may expect a "rough handling." There was a good deal of liquor sold, at 50 cts. per glass, and \$5 per bottle. There was a man buried a short distance from our camp, who died from the effect of drink at these prices.

On Sunday, there was an election for Alcalde, and an auction. I saw panol bought, at \$40 per 100 lbs. for horse feed. The Mexicans prepare it by roasting the wheat before grinding it, and eat it with sugar and water. We saw very few men digging on the Sabbath; with the above exceptions, the day was pretty well observed. In the evening, when nothing was to be seen but the many camp-fires, and all was still but the low hum of conversation as it came up from the different groups gathered around the lights, all at once, from the opposite side of the arroyo, a loud musical voice struck up. "On Jordan's stormy banks I stand," &c.

It sounded strange, and yet familiar, in this wild, pent-up corner of the world; as the sound rolled along the gulch, and reverberated from hill and mountain, it reminded us of "good old Methodist times" at home, and we concluded that the singer must be one of 'em.

Green, Howard, and Fox, who worked together, were rather more lucky in digging than Musser, Schaffle, and myself. Howard picked up a piece, containing some quartz, which weighed nine ounces. I saw one piece that weighed five lbs., and several others weighing 3, 2, and 1 lb. Mr. Armstrong became dissatisfied with the country and diggings, and made up his mind to go home. I believe he never struck a blow nor washed a grain. He had been unwell for some days. We were sorry to see him leave; he had been a good fellow, and deserved the best wishes of us all.

I suffered more from sickness during the two weeks I remained in the mines, than I had for many years previous. Howard, Musser and Fox were also unwell. Indeed, we did not know the condition to which our systems had been reduced by the fatigues of traveling, and scanty allowance of food, until we attempted to work. Fearing that we would not recover until we got out of the place, Musser and myself concluded to go "down country," see San Francisco, Stockton, get our "news," purchase a tent, and supply of provisions, pack them into the mines, and winter there. Accordingly, we got up "Old Whitey," for whose board we had been paying 50 cts. per day with the privilege of browsing upon the mountains, packed seven saddles, blankets, saddle-bags, empty packs, lariats, and provisions upon her back, and started on foot, leaving Green, Howard, Schaffle, and Fox in the mines.

Nothing particular occurred, and we reached Scott's ranch, on the evening of the second day; we had traveled very slow on account of our weakness. Part of their "caballada" having gone astray, we were detained here two days, hunting our mules. We mounted two of the best animals, which had improved considerably, and set out from the ranch in the afternoon, our course north, over a high barren plain. We had no road, and when night set in, the heavens clouded over, and a slight sprinkle of rain fell. This was on the 11th of October, and the first rain of the season. We managed to keep our course in the darkness, until we reached the Towalume river. We groped our way down the bluff, and encamped on the flat, i. e. lay down in the rain, beneath a large tree, where the big drops pelted us all night. The Towalume river resembles the Marceides in many particulars; perhaps more timber growing on the flat. We descended the stream several miles, found a crossing, and continued down the north side. Passed an Indian "Rancherie," where they have constructed a very ingenious fish trap, upon which they depend for subsistence, until the acorns ripen, and grasshoppers grow fat. The wild Indians of California are the most miserable looking, indolent, and degraded portion of that race of people, I have seen since leaving the frontiers of the States. We stopped about noon at a tent, a few miles from the mouth of the river, to graze our animals. Here we saw Mr. Armstrong's mule, saddle, &c. Upon inquiry, we learned that he had lain sick here for several days, sold his mules, &c., and proceeded on foot for Stockton this morning. We were apprehensive at first, that something of a still more serious nature had happened him. Struck out in a N. W. course for the Stanislaus river, over another high, dry, barren plain. Reached the lower ferry about dusk, where we forded the stream. Could get nothing to eat, and being out of provisions, we applied to the ferryman—a most forbidding looking

Irishman, who immediately shared his scanty store with us. We offered to pay him, but he refused to take anything, saying that we should do likewise at the first opportunity, &c. We took the advice, and had another proof that appearances often deceive. We traveled down the river some miles after dark, in search of grass. About 9 o'clock we spied a light, and on coming up to it, found a number of Spaniards encamped, and turned in with them.

In the morning, we again struck out across the plain, and about 3 o'clock P.M. reached the lower ferry on the San Joaquin river. This ferry is owned by three young men, Bonsall, Doak, and Scott, and is a very valuable property. Mr. Bonsall, (who left Clearfield Co., Pa., when a boy, and has since worked in the lead mines of Mo.) told me the other day, that he had been offered \$100,000 to drop his interest in the concern, and "take his bones out of the country." Here we intersected the main land route between San Francisco, San Jose and Stockton, or in other words, between the northern and southern portions of California, divided by the bay of San Francisco. After taking dinner, we ferried over, at \$1 each for man and mule. Stopped at M' Caffrey's Tent, or the "Elk-horn Inn of the San Joaquin," as he was pleased to call it. (San Hwa-keen, J always having the sound of H in the "Lingua Espanol.") In the morning, after breakfasting upon salt pork, sea biscuit, and coffee, for which we paid \$1.50 each, we again backed our mules, and pursued our way. The road was very fine, over a level plain, to the mountains on the west of the valley, and appeared lined with travel. The distance across this range of bald mountains, is about 8 miles; the ascent and descent very gradual, except the dividing ridge, which is somewhat abrupt. Nooded at a spring on the mountains, and reached Livermore's Ranch, in the evening.

[To be continued.]

The Spring Flowers. An—The Spring flowers. The spring flowers have their time to bloom, The summer dews to fall; The stormy winds to rise and come, At winter's dreary call; The nightingale knows when to sing Her ravishing melody, The stranger bird to stretch her wing Far over the distant sea. The silent stars know when to raise Their shining light on high, The moon to shed her silver rays From out the azure sky, The sun his chariot wheels to roll Toward the golden west, The birds to flow from pole to pole, The dancing waves to rest. Thus while creation owns a power Supreme o'er earth and sea, That portions out some shining hour For all his wondrous deeds, And since of Nature's works the prime, Man boasts his noble mind, Shall he ungrateful, owe to time To thank the Lord of all!

Dead Letter Office.

The Republic states, that the bulk of opened letters, returned to the Department, in one quarter, equaled about 6000 bushels, crammed; each bushel is supposed to contain 1000 letters. The number returned in a quarter, is therefore about six millions, or twenty-four millions a year. "Unclaimed moneys, less the discount, are handed over to the general treasury, subject to the demands of the rightful owner, but we believe, for the half year ending June 30th, 1850, the amount of those was not more than about \$17,000. "Dead letters are usually unpaid letters. The custom of pre-payment has become vastly more general since the reduction of postage to five and ten cents. In the 4th quarter of 1850, the number of dead letters received from Cincinnati, not pre-paid, was 8,700; the number of dead letters, from Boston post-office numbered 1,612; of letters not pre-paid 9,401. These instances are at random." A powerful Appeal.—An old patriot of Reading offers himself as a candidate for Mayor of that city, and in a card to the "dear people," enumerates among his "claims" that he supported the American flag as a volunteer in the military service from 1812 to 1819—that he has been for several years elected Constable—that he has been for 12 years a deacon of the church—and that he in fact contributed \$60 to build the church.

Mr. Wesley, in a letter to one of his preachers, says: "Scream no more, at the peril of your soul. God warns you by me, whom he has set over you. Speak as earnest as you can, but do not scream. Speak with all your heart, but with a moderate voice." Jewelry is becoming quite fashionable again. One of our cotemporarys says he met a young lady on New Year's who had a farm on each wrist, a four storey house around her neck, and at least six memberships to the Bible Society attached to each ear.

Mr. Berrien, in presenting a memorial to the Senate, stated that no autumnal or yellow fever had occurred in Savannah for the last twenty years, owing to the system of dry-culture and draining which prevailed there.

The Farmer.

Analysis of Soils.

Every farmer knows, or should know, that the soil of his farm is made up of two kinds of materials. One kind is called organic material, which is derived from some plant or animal that has had life, and that life been sustained while it lived by certain apparatus, or organs, which made up its structure. The other kind is called inorganic material, and is made up of mineral matters. These have never been possessed of what may be called life, or had any apparatus or organs to sustain life.

Every farmer knows, or should know, that every crop which grows upon his soil is made up by taking more or less of these materials, and combining them into the particular crop grown, whether it be grass, or wheat, or corn, or roots, or pumpkins, or fruit; and that, in process of time, any particular crop will take and continue to take the material from the soil necessary to make it, until it has taken the whole, and there is no more left to form a crop of, and it fails to grow. The soil is then said to have become poor or exhausted. Every farmer should know, but very few farmers do know, what particular material each crop requires to take from the soil, or whether the soil has enough, or any, of these materials in it to make a crop. How should they know it? It is the business of the chemist to ascertain this, and the farmers, especially the old ones, have never had any opportunities of learning this, either theoretically or practically. Chemistry has been a sealed book to them, although there is no class of persons on earth whose daily business is so dependent on its laws. The farmer is a practical chemist on a large scale, though it may not be in a particular branch. He is constantly performing chemical experiments, though he may know it not, and can not explain why this or that result follows his operations.

The taking a soil and separating the materials of which it is made, into separate parts by themselves, so that they can be weighed, and the proportion they constitute actually known, is called analysis. It is a chemical operation which must be done in the laboratory by the means of a chemical apparatus, used with chemical knowledge. As we before said, the older farmers have never had an opportunity to become either theoretical or practical chemists, and it can not therefore be expected that they should be able to analyze soils.

Are the younger ones—are the rising generation, any better provided with the means of becoming acquainted with chemistry and the particular branches of philosophy applicable to their calling? In many respects they are; but we grieve to say, not half nor a quarter so well provided with such facilities as they should be. There ought to be practical schools of chemistry in every town—real bona fide workshops, where boys, and girls too, should go and perform the analysis themselves—sweating at the furnace, and blackening their hands with the charcoal and dust in actual chemical labor, and work out the result by their own skill, instead of sitting quietly and demurely and seeing their teacher do it. One experiment of the kind, thus actually done by the hands and thoughts of the boy himself, will fix the facts stronger and clearer in his mind and memory than a thousand merely looked at, as he sits and watches his instructor.

In the absence of such schools, we know of no better plan than for a young man to endeavor to teach himself. It would require some outlay for apparatus, acids, &c., &c. In order to assist any such, we propose to select from such sources as can be relied upon, such directions for analysis of soils as we may find—sometimes modified by such hints as our limited experience may dictate.

Mr. Dana, several years ago, laid down some very simple rules for this kind of analysis, which were subsequently adopted by Prof. Hitchcock while engaged in the geological survey of Massachusetts. This mode of analysis may not lead to quite so accurate results as some others adopted, but it will be very nearly correct, and lead to a very correct knowledge of the ingredients of the soils operated upon. It does not require so expensive apparatus as some other modes.

You want a delicate and accurate balance with grain weights, a few crucibles—if you can get some platinum crucibles they will be of great service, tho' they are expensive and you can get along with what are called Hessian crucibles—some bottles, pure acids, &c. The following are the rules referred to:

1. Sift the soil through a fine sieve. Take the fine part, bake it just up to the brown of paper.

2. Boil 100 grains of the baked soil with 50 grains of pearl ashes, saleratus, or carbonate of soda, in 4 ounces of water, for half an hour; let it settle, decant the clear, wash the grounds with four ounces

of boiling water—throw all on a weighed filter, previously dried at the same temperature as was the soil, (rule 1,) wash till colorless water returns through the filter. Mix all these liquors. It is a brown-colored solution of all the soluble geine, (sometimes called vegetable extract.) All sulphates have been converted into carbonates, and, with any phosphates, are on the filter. Dry that, with its contents, at the same heat (rule 1,) as before. Weigh it—the loss or difference from 100 grains is soluble geine.

3. If you wish to examine the geine, precipitate the alkaline solution with excess of lime water, (which was passed through the filter.) The geine of lime will rapidly subside, and if lime enough has been added, the liquor will pass colorless. Collect the geate of lime on a filter, wash it with a little acetic acid or very diluted muriatic acid, and you have geine quite pure. Dry and weigh.

4. Replace on a glass or porcelain funnel the filter (rule 2) and its earthy contents; wash with 2 Drains muriatic acid, diluted with 3 times its bulk of cold water till it passes through tasteless. The carbonate and phosphate of lime will be dissolved with a little iron, which has resulted from the decomposition of any salts of iron, besides a little oxide of iron. The alumina will be scarcely touched. We may estimate all as salts of lime. Evaporate the muriatic solution to dryness, weigh and dissolve in boiling water. The insoluble will be phosphate of lime. Weigh—the loss is the sulphate of lime.

5. The earthy residuum is of a greyish white color, and contains no insoluble geine. You may test it by burning a weighed small quantity on a hot shovel—if the odor of burning peat is given off, the presence of insoluble geine is indicated. If so, burn (calcine) the earthy residuum and its filter. Weigh—the loss of weight will be in the soluble geine, that part which air and moisture, time and lime will convert into soluble vegetable food. Any error here will be due to the loss of water in a hydrate, if one be present, but these exist in too small quantities in "granitic sand" to effect the result. The actual weight of the residuary mass is granitic sand.

The clay, mica, quartz, &c., are easily distinguished. If your soil is calcareous, (limy,) which may be tested with acids, then before proceeding to this analysis, boil 100 grains in a pint of water, filter and dry as before, the loss of weight is due to the sulphate of lime: even the sulphate of iron may be so considered, for the ultimate result in cultivation is to convert this into sulphate of lime.

Test the soil with muriatic acid, and having thus removed the lime, proceed as before, to determine the geine and insoluble vegetable matter.

By following the above directions, a very good general analysis of the soil will be obtained. We have spoken of the geine as being the name of the vegetable matter obtained. Chemists have been not fully agreed in regard to the action of this material as food for plants. We will consider this matter further in our next.—[Maine Farmer.]

Charcoal and Water.

[The following useful hints we abridge and copy from the Agricultural Part of the Patent Office Report.]

About one half of the dry weight of all plants, is carbon, or charcoal. Of the other moiety, more than four-fifths are water, or, more correctly, the elements of water, called oxygen and hydrogen. Without the presence of moisture, both in the soil and the atmosphere above it, no plant can grow; and the presence of carbon, in a dissolved or gaseous form, is equally indispensable to the production of all vegetables.

It matters little whether carbon is accumulated in a solid form by imperfect combustion, as in the making charcoal from wood in a common coal-pit, or by the slow decay of plants (cremation of Liebig) in forming mould, peat, and peat. The power of these carbonaceous and exceedingly porous bodies, to condense the gaseous food of cultivated plants, should be universally known.

Gaseous compounds of phosphorus, obey the same general law. All well pulverized earths have a similar property of condensing oxygen and other gases; and thorough tillage greatly promotes the condensation of vapors and gases about the roots of plants, to nourish them. Charred peat, muck, and wood, are exceedingly valuable to mix with all manures to prevent the escape of fertilizing elements which are volatile and liable to rise into the atmosphere.

Charred muck, peat, and wood, are coming into extensive use in deodorizing night-soil, aided by gypsum and common salt. By these means a fertiliser of great power, and perfectly inodorous, may be formed, suitable to be planted or drilled with all seeds. Well dried and finely pulverized clay is a valuable deodorizer, and is