

## FARMERS' DEPARTMENT.

### Production & Consumption of Mold in Soils.

Few subjects are more interesting than the natural laws which govern the production and consumption of organic matter in soils. By the terms "organic matter" the unlearned reader will understand a substance which was once a part of some living vegetable or animal, and was organized by vitality.

Once all lands covered with forests or other growing vegetation, the production and consumption of mold are constantly in progress. When production exceeds consumption there is of course an increase of vegetable matter on the surface of the earth. On the other hand, if from any cause the decomposition of mold is larger than the additions to it, a diminution of the amount of organic matter ensues.

The quality and agricultural value of mold depend mainly on the character of the plants by the decay of which it has been formed; and by the length of time which the vegetal debris has been washed and leached by rains, since, the vegetables ceased to live.

Plants and forest leaves that abound in azote or nitrogen, in sulphur, phosphorus, lime-potash, soda, magnesia and chlorine, yield a far richer mold than such as contain very little of the elementary bodies named. One hundred pounds of wheat, oats, corn, peas, beans, clover, and cabbage, will produce rotting, better mold for all agricultural purposes, than a like weight of pine wood, rye straw, or other vegetable substance which is poor in bread and meat-forming elements. Common wood and all plants lose a portion of their earthly salts, (which appear as ashes when they are burnt) if long soaked in water.

Old and long weathered cornstalks, grass and straw will have parted with more or less of their fertilizing atoms by protracted exposure. Hence, after plants cease to live and begin to decompose, the sooner they are plowed in, and mingled with the earth, the less they lose, and the more valuable they are to enrich the soil. The process of disorganization is governed by chemical laws as certain and uniform, as those which regulate the re-organization of the same or similar atoms, in developing the germs of a new generation of vegetable existences.

The elements of water, oxygen and hydrogen, which exist in all plants, separate and pass off faster in mold than carbon and azote. It is carbon, or the great element of coal and lamp-black, that renders muck, and mold darker colored than were the vegetables, before they began to undergo any chemical change.

Light, heat and moisture hasten the decomposition of all vegetable and animal tissues, and the consumption of their remains or mold on the surface of the earth.

The same natural agencies equally favor the growth of the plants, and the re-organization of mineral matter to serve as food for animals. The tillage and cropping of the husbandman being purely artificial operations, are extremely liable to destroy the balance in organic nature; to the injury of the soil.

Tillage greatly promotes the decay of organic elements in soils, and the solution of the before nearly insoluble salts of silica, lime, potash, magnesia, &c., that furnish aliment to all crops. Vegetable and animal substances when rotting, evolve gasses, which attack insoluble compounds of flint and lime, potash, soda and magnesia, and render all these minerals available to growing plants, which imbibe them through their roots, and fix them permanently in their tissues. In nothing is the wisdom of God more perceptible, than in regulating the solubility of mold and the minute particles of rocks, which together, form all the diversified soils on our planet. Without this admirable adjustment for hourly, daily and annual feeding plants which in turn feed animals, both would soon cease to be on earth. How shall we make plain the comprehension of a child, the science of feeding plants—the art of accumulating bread, meat and fruit in the soil?

In 100 parts of fresh, lean meat there are 77 parts of water which may be expelled by drying. In 100 parts of perfectly dry beef there are 42 of ash, or incombustible salts.

Muscle contains about 45 per cent. of nitrogen; and nearly 52 of carbon. The other constituents are oxygen and hydrogen, or the elements of water. Lean meat, like the seeds of cereal plants, contains sulphur, phosphorus, lime, iron, and all the elements required to form bones, brain, nerves, skin, &c. Hence, a dog or other carnivorous animal can subsist on lean meat, or on bread and water alone. A good cow extracts from the soil in her food, some 40 or 50 lbs. of bone-earth, in the course of a year. Thirty pounds of this will be given in her milk, which will be sold, probably, in cheese, and the balance will be in her urine and dung. In 100 lbs. of wool there are five pounds of pure sulphur. In 100 lbs. of gypsum there are some 20 of sulphur. Gypsum aids in making clover, peas and beans, and they make wool; and old woolen rags will form rich mold. For the same reason, clover, peas, and all leguminous plants, yield valuable food for a crop of wheat. But to begin at the beginning: How is a farmer to raise large crops of grass, clover or peat on poor land? The thing cannot be done without manure, or good ashes to furnish the constituents of the crops, which nature demands and the soil does not contain. It is silly to believe for a moment that two tons of timothy or clover hay, or 20 bushels of wheat, can be organized out of nothing, or from any other materials than such as the Creator of all things has appointed for that purpose. So far as the subsoil posse lime, potash, phosphorus and sulphur, deep plowing and subsoiling will render these elements available to cultivated plants. But on most soils, it will be found good economy to apply lime, plaster of paris, ground bones, salt, forest leaves, wood ashes, and all the manure one can possibly save, or make on the farm. There is just as much propriety in laying up raw materials for making wheat, corn and potatoes, as there is in having a crib or store house full of grain for making bread. Lands thickly set in grass and not injudiciously fed,

nor mown, i. e. not robbed of their products, will gain from the subsoil and atmosphere, the organic and inorganic elements of human food and clothing. To scarify old pastures with a sharp harrow, sow more seed, and apply a top dressing of gypsum, is often followed with the happiest results. Similar treatment of meadows, or a top dressing of ashes, or one of lime alone, will greatly increase the product, in most cases.

It will not do to be ever removing grass in the stomachs of domestic animals from pastures, add hay and grass from meadows, and make no return. This is the right way to impoverish an estate, and render it comparatively worthless. Remember that, by improving land, you lessen the expense of raising everything of a vegetable or animal nature which it yields. Very few men make the difference large enough between the price of poor, and that of good land. Every acre should be reasonably certain to give 50 bushels or corn and 25 of wheat. A plenty of lime, of potash, and of the mold formed by pea vines and clover, will achieve such a consumption.

If the surface and subsoil naturally lack lime, its sulphates, phosphates—if the earth has a small allowance of potash, magnesia, soda and chlorine in its composition—it is unreasonable to expect large crops annually which consume in growing, a good deal of these indispensable elements. Soils poor in alkalies and alkaline earths, must not be expected to yield much bread and meat per acre, no matter how large a quantity of swamp muck is added, unless lime, potash, phosphorus and sulphur are added also—Bones, gypsum and salt, or good wood ashes, will give rich mold, by the aid of clover, peas, grass or corn; and a mold rich in the elements of flesh and bones, will be certain to furnish the farmer with cheap potatoes, cheap bread and meat. In raising wheat, it is not desirable to have a soil largely stocked with organic matter. Hence, it is often better to have the 40 per cent. of clover voided in the dung and urine of sheep, evenly spread and distributed in the soil of a wheat field, than to plow in the whole crop without permitting any animal to feed upon it. In the latter operation, more than twice as much organic matter is added to the soil, as in the former. Whenever an agriculturist has reason to believe that a field lacks mold, he should grow crops and plow them in, rather than pasture it, or otherwise consume the vegetables that it produces. This will augment its mold.—*Genesee Farmer.*

### Mixed Husbandry.

By the adoption of mixed husbandry, says Mr. Seabrook, the fallow system will be abandoned and fallow crops take its place. The cultivator will become substantially a farmer, and no longer wear the insignia of a planter. It follows that one-third, in some cases one-half, of the real estate in possession of many of our profession, might, in such an event, be sold, and the profits appropriated to the improvement of the remainder or converted into legacies for their children, instead of compelling them, for the supposed want of room, to seek their bread in foreign climes. The amount of capital invested in land by individual proprietors, ought to be diminished. There is perhaps no barrier to agricultural progress which has attracted so little notice the disposition to hold landed property incommensurate with the force actually engaged in its cultivation. No fact is better established than that any quantity of ground, under the supervision and control of an intelligent and practical man, will give larger returns and insure more comforts, than three times the arena, in unskilled and improvident hands. As a rule cultivate one acre systematically manured, than three acres unprovided with appropriate pabulum, or only partially aided; in other words a small plot of ground capable of being put in a garden-like condition, than the broad occupier of immense tracts, a stranger perhaps to the plough or hoe certainly to the artificial food designed for the maintenance and support of cultivated plants.

The secret of the accumulation of wealth lies not in disbursing the profits of the farm, in adding to its size, or increasing the number of laborers, but in expending them in such improvements as the skilful and experienced eye may point out. This is the true and only mode of permanently enlarging the productive capital of the State. By this means the owner of 100 acres may be the proprietor of as much land as the holder of five times that quantity, with the advantages among the many others, in favor of the former, that he pays less taxes, and is certain of progressive improvement in the value of his property. Let the excess of income, then be appropriated in draining—in reducing to culture every pond and morass within the inclosure—in good buildings—in substantial and durable fences, and where there is necessity, to purchase mineral or animal manures, and in judicious and economical experiments.

**WASHING SHEEP.**—A correspondent of the Prairie Farmer says he washed his sheep last spring in the following manner—as recommended by an experienced wool dealer:

I took a trough that would hold about a barrel, and filled it with soap suds. I laid a board on one edge of the trough, slanting towards the trough, so flat when a sheep was dipped and taken on the board the water would drain into the trough. A boy took the hind legs of the sheep, and I took the fore legs, and turned their back into the trough; then raised them out on the board and squeezed the wool thoroughly with our hands. When the soap suds grew low we would add more—having a quantity of dissolved soap in readiness. The suds should be made very strong.

When we had thus soaked them all, we commenced washing. I found the wool whiter and cleaner than I ever got it before without soap, though I have helped to wash sheep more than twenty years. And when we came to shear the sheep, we found the ticks all dead. Not more than four live ticks were found on any one sheep.

**To Farmers and Dairymen.** THE subscriber having purchased the right of manufacturing and vending Crowell's Patent Thermometer Churn, would cordially recommend this to every farmer and dairymen as the best churn ever introduced to the public. The principal advantages this churn has, over all others, are these: 1st, it is constructed in such a manner that the top can be taken off so as to give free access to the interior, which makes it perfectly convenient to clean the cream and take out the butter—the paddles can be taken out, making it still more convenient to clean. 2nd, a thermometer is attached to the churn so as to show the exact temperature of the cream, which experience shows should be from 60 to 62 degrees. 3d, a chamber or space is arranged around the bottom of the churn for the purpose of admitting cold or warm water so as to bring the cream to the right temperature without mixing the water with the cream. It is well known to all butter makers that cream too cold when churned, takes much longer time in churning than at the proper temperature—besides a portion of the butter is left in the buttermilk. It is also well known that warm water mixed with the butter is always injurious and very often spoils the butter. The thermometer churn effectually remedies all these evils. It churns equally well in warm or cold weather. There is no such thing as having the cream too cold or too warm in this churn if it is properly managed. An examination and trial of this churn is alone deemed sufficient to recommend it to public favor. It has been fairly tested in this and in other places, and wherever it has been used it has never failed of giving the most entire satisfaction.

Montrose, May 15, 1849. WM. K. HATCH.

### First Arrival.

*Spring and Summer Goods for 1849.*

ALL who are desirous of purchasing new goods are invited to call and examine the large and splendid lot of plain, cambric and stripe silks, plain alpacas, and plain and figured satins, plain organdie, and cambric and stripes of all descriptions, a large stock of hosey linens, handkerchiefs and sheet diapers, counterpanes, lace and edgings, white goods, bluish and green gauze veils, baronies, fine muslins and Irish linens, a large variety of calicoes and furnishing prints, batting, cotton yarns, carpet warp and table spreads, some beautiful goods for ladies' socks, cambric, white, colored and black kid gloves, gent's kid gloves, linen and silk pocket handkerchiefs and cravats, summer cloths, ink, steel pens, holders and wafers, 75 ps. cloths, cassimires, tweeds and satins, 75 ps. silk, worsted and velvet vestings, Napoleon cord, suspenders, boots and shoes, brown flannel, checks, flannels and bleach muslins. A large supply of summer goods, bonnet linings, and taffeta ribbons, a beautiful stock ladies and misses bonnets, spring and summer fashions of every style, unusually low, good molasses for 33 per gallon, sugar 16 pounds for \$1, Fall River nails for 5 cents, clover and timothy seeds, good heavy sheetings for 4¢ cents Swedes iron, iron rods, spring steel, hand iron, tire iron, round and square bars, the cheapest and best tea in town, tobacco, chin, cigar, tobacco, wheaten and buckwheat flour, cod-liver oil, sugar, sugars, sperm and tallow candles, window glass and glass, axes, steel shovels and digging forks, etc. etc.

All of which will be sold at a small advance for cash, produce or approved credit, at Springfield or Montrose. LATHROP & SALISBURY.

### Gold this side of California!

TO BE SOLD BY TRADING CHEAP.

### Grocery, Confectionary and Oyster Saloon.

THE railroad being completed, I now have, and keep a general assortment of groceries cheap—such as sugars, molasses, rice, coffee and teas, of prices and quality such as will please. Also, nuts, raisins, candy and all kinds of fruit the market can furnish my buyers to suit. Also, fresh clams and oysters received in the shell, fresh fish too, this weather—they keep very well—I shall get by the railroad a weekly supply—to please all my customers' taste I shall try. Good oysters on hand by the keg or the dish—served up either raw or cooked, as you wish. All needed refreshments prepared at a wink—call in, all ye hungry, and plank down the chink. WM. F. BRADLEY.

Great Bend, F. 13.

### Railroad Freight and Commission

LIME FROM BINGHAMTON.

THE subscribers having completed their arrangements are now ready to receive all kinds of produce at the railroad depot in Binghamton and forward it to New York and make sale of the same.

Capt. William Clark (who has had a number of years experience in the sale of produce in the New York market) will attend to the sale of all property entrusted to our care, which will enable persons forwarding by this company always to recover the highest market price for their produce.

Our charges over the regular freight will be a small commission for sale.

The returns will be paid at the store of U. M. Stowers in Binghamton, or in New York if required.

U. M. STOWERS,  
WM. CLARK,  
H. F. JUDSON.

Binghamton, Jan. 1, 1849. 2-6m.

### Fire! Fire!

WASHINGTON CO. MUTUAL INSURANCE COMPANY AT GRANVILLE, N. Y.

Over Ten Millions Insured, and a Large Accumulating Cash Fund.

THE undersigned, having been duly appointed an Agent of the above Company, would respectfully call the attention of the public to the numerous advantages this Company have over all other institutions of the kind. They insure none but the safest kinds of property, (being a Farmer's Company,) and take no risks over \$2000. Their policies are made on fair and equal principles, giving the insured an equal chance with the Company, being entitled to the full amount of damages not exceeding the amount insured, without deducting one third, as is customary with some other companies. They are prohibited by their By-Laws in insuring risks upon any kind of property.

Our charges over the regular freight will be a small commission for sale.

The returns will be paid at the store of Wm. Dayton in Great Bend or in New York if required.

WML DAYTON,  
WM. CLARK,  
H. F. JUDSON.

Great Bend, Jan. 29. 5-1y.

### Village Lots for Sale.

THE subscriber offers lots for sale in the town of Great Bend in the village of Greenville, and directly opposite the village of Great Bend, located on the Depot of the New York and Erie railroad, and the Great Bend and Cochecton Turnpike, in the valley of the Susquehanna river. The railroad crossing the said turnpike, thence running in a curved line nearly parallel with the same at the distance of a few hundred feet, with the grounds gradually rising above railroad and turnpike, overlooking the river and the beautiful valley, compared with its healthy climate, renders it a most desirable location for building purposes.

The depot ground of the railroad company being located in the centre of a rich and extensive agricultural district, surrounding it on every side with its many roads centering in, and all other advantages combined, afford every advantage to a business population.

An Extensive Water Power can be brought from the Susquehanna river, adjoining the depot grounds of the said rail road, sufficient for the erection of all manufacturing establishments, any machinery required.

Great Bend, 52y. L. GREEN.

### Notice.

THE undersigned would respectfully inform their friends and the public that they have formed a partnership in the Tanning, Currying and Shoe-making business. They flatter themselves that by strict attention to business to merit a share of public patronage.

W. M. HANDRICK,  
MERWIN T. HANDRICK.

Springville, N.Y.

I avail myself of this opportunity to say to my old customers that I shall require as much time to settle up to the time of parting, I hope none will delay beyond the first of May.

W. M. B. HANDRICK.

### Ploughs.

A FULL assortment of Ploughs of the most approved patterns of Montrose and Binghamton manufacture, and castings, just received and for sale at reduced prices by

H. BURRITT.  
New Milford, April 10, 1849.

### Good Waynes County PLOWS for only \$4.25.

2' VURRELL'S

WHITE and Yellow Boot Seed, for sale by the pound or otherwise, at the ARCADE.

Montrose, a12

W. STEPHENS & CO.

PALETHIA GUNNISON, Adm'r.

Montrose, a12

W. STEPHENS & CO.

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