

# LEWISBURG CHRONICLE.

BY O. N. WORDEN & J. R. CORNELIUS.  
H. C. HICKOK, CORRESPONDING EDITOR.

Fridays—at Lewisburg, Union County, Pennsylvania.

ELEVENTH YEAR....WHOLE NUMBER, 566.  
\$1.50 PER YEAR, ALWAYS IN ADVANCE.

## The Lewisburg Chronicle.

FRIDAY, FEBRUARY 16, 1895.

### Pennsylvania Common Schools.

We are indebted to the Deputy Secretary, Mr. HICKOK, for an early copy of the Report of Hon. CHARLES A. BEACH, late Superintendent of the Common Schools of Pennsylvania. We say "early," for altho' the School Year ended 6th June last, and the Report was communicated to the Governor 5th Jan. last, it has but just issued from the press! The new Superintendent (of Public Schools and Public Printing) we hope will regulate these matters, hereafter, in better time. Reports like this can and should be printed and distributed before the General Assembly meets, in order that Legislators and the People may have time carefully to examine them and be prepared to take action when the Representatives of the People have met.

The Report proper embraces 20 pages, with an Appendix of 160 pages containing more or less extended Reports from County Superintendents, &c. The counties of Allegheny, Luzerne, Somerset, and Union have not been heard from through their Superintendents.

From a cursory examination, we believe the Report should be widely circulated, and would have a good influence upon the public mind.

The present universal School System was commenced in this State, now twenty years ago, under the administration of Gov. WOLF, but was especially advanced under Gov. RISENER, whose "bright hand" men were and still are those champions of Common School Education—Thaddeus Stevens and Thomas H. Burrows. The succeeding Governors have also all been firm friends of the system, which may now be considered as the established policy of the State, only to be changed by being more strengthened and consolidated.

Although it is twenty years since the system was established, our Report is felt for 17 years only. We give a comparison of two years—the first and last—to show the change wrought in 17 years:

No. of Districts	1836	1853
987	987	1,551
No. of Schools	3,384	9,507
Time Schools were open 4 a. m. 3d.	5 m.	5 m.
No. of Teachers	3,394	11,230
Average monthly Salary		
of Male Teachers	\$18.34	\$19.25
of Female Teachers	11.96	12.08
Do. Female Teachers	11.96	12.08
No. of Scholars	159,904	474,553
Aver. No. per School	41	42
Aver. cost Teaching per		
Scholar per Month	\$1.08	1.29
State Appropriation	98,670	184,390
Tax levied	297,165	1,021,337
Exp. for School Houses	111,803	147,516
Other annual expenses	193,972	815,991

These are visible results. The influence of this increased means of knowledge in harmonizing discordant elements, quickening the dormant intellects, and sowing the seeds of good morals and truth, can never be fully estimated, but certainly has but begun to be developed.

We believe it will also be found, that during the past twenty years, the number of Private Schools, Seminaries, Academies and Colleges has increased in a corresponding ratio with Public Schools. If so, we doubt whether any State in the Union deserves the credit of making more sacrifices for the great cause of Education, than the steadfast Keystone.

\*From the Report of the Superintendent of Cumberland county it appears that Ex-Gov. Riser, although now over 70 years of age, retains an undiminished interest in the cause, and cheers the heart of the teacher of his district by visiting him once a week. (Query—Will the Directors visit the schools once a month?)

**From Philadelphia.**  
(Correspondence of the Lewisburg Chronicle.)  
PHILADELPHIA, Feb. 9, 1895.

DEAR CHRONICLE: It is so long since I have written your name, that it seems almost new to me, and yet I look for your familiar face with as much interest each week as we do for "HARREN" at the end of each month. Let me congratulate you on your improved appearance; you deserve success. The fact that you can afford a new dress in the midst of such hard times, is evidence that you do succeed; and that "Janitor" look you wear, precludes all idea of grey-hair-breeding troubles.

You may thank your stars, who are so happily removed from this boiling pot of jammon; you sit quietly among your peaceful hills, like some snug barque riding safely upon the broad ocean, while many a noble hull is being battered to pieces among the breakers that lash the treacherous coast. But,

"While terra firma on her axis  
    Revolves serene,  
Life will be very likely to present the same kaleidoscopic changes of aspect. The sun which today is reflected from faces, bright with conscious prosperity, may to-morrow fall upon the reflex of crushed spirits, and bankrupt hopes. Such is the tide we ride upon; such the waves which engulf thousands. The last new year dawned upon unparalleled prosperity; this, lighted up a barren waste, and the usual rejoicing were drowned in the cry of hard times!

"Hard times!"—The man of business may repeat the cry, until he believes him-

self a very bankrupt; may use the potent spell to put off his creditor with one hand, and pinch his unfortunate debtor with the other, may even fall under the sheriff's hammer; but not by him is hard times felt. The law gives him an allowance, his children are fed and clothed, and he has sympathy and friends; he knows nothing of hard times!

If you have a heart of stone and nerves of iron, let us take a stroll among the suburban residences of the mechanic and laborer. But why should we go to seek them? We can see them at our very doors. Look at that strong man with his small market basket, as he passes from door to door; he is no drunkard; his face is intelligent, and the look of sorrow speaks of a heart within that urges him on in his work of love, while the frosty wind whistles around his shilly clad frame. He is striving to earn a supper for his wife and little ones, by selling apples! Long out of work, reduced to starvation, yet too proud to beg, he has invested his last shilling in that little stock he is striving so awkwardly to sell.

He is but a type of thousands. At every turn, in every street, the same look of distress; the same traces of hard times, are seen; the cry of "give! give!" comes up continually, from little outcast children and miserable women—mothers! Philanthropy has a wide field—too wide for all to feel her influence, for notwithstanding the noble efforts that are made in behalf of humanity, it is impossible to relieve all. But, while the most heart-rending distress is everywhere seen, extravagance and folly still reign unchecked—money that would hush the wail of woe that comes up from the noisome dens where starvation and pestilence dwell, is lavished on the most useless baubles, and in the most ostentatious extravagance, and the pleadings of charity are drowned in the din of fashion and dissipation.

Look at those heavy folds of costly silks sweeping by—those rich furs, the sight of which sends a genial warmth through the frame—that jeweled arm helping the train across nasty gutters—why, sir, that bundle of silks and furs, jewels and feathers, would bring five hundred dollars under the hammer. What a contrast to the shivering wretch seated on that icy step, her one hand extended for charity, while the other clasps the folds of that tattered garment around her famished babe!

Look at that line of splendid equipages, and liveried menials, that line the curbs in front of those haunts of extravagance and pride, the fashionable stores of Chestnut St. or Broadway—those "furnishing undertakers" where the fortunes and hopes of thousands are "laid out" and coffined, and buried—and then talk of hard times!

Or, let us step into the Opera; a moment; it is Gris and Mario's night. Look around this parquette, and those two tiers of boxes; all these, save only the press, have paid Three Dollars a head. Try to estimate the value of that display of velvets, furs, jewels, white kids and lognettes; and low many starving women and children the sum total would make comfortable through these dreary winter months, and see if we are not an extravagant and hard-hearted people.

"Man's inhumanity to man  
    Makes countless thousands mourn,"  
and surely there is a species of inhumanity in this thoughtless waste and forgetfulness of our suffering fellow-creatures.

But they are not all forgotten. Through unwholesome lanes, and among the haunts of misery, the Good Samaritan is continually traced: sometimes in the form of generous manhood, but far oftener that of gentle woman; alleviating the sufferings of the destitute, providing for their temporal wants, and leading them by kindness to lives of reform, distributing alms with one hand, and bearing in the other the bread of life.

Perhaps I have moralized long enough; but, really, the number of wretches one is compelled to turn away from his door every day, is enough to make a very hard heart sorrowful. No matter how unworthy they may be, they are our fellow men, and susceptible of suffering as much as ourselves.—Oh! you are happy in the country.

But there are strong hopes that an antidote for all our trials has been found, thanks to the good pleasure of his restored holiness, Pio Nino, and the infallible conclave who declared the "immaculate conception," the neglect of which has no doubt caused us as many woes as "Achilles the son of Pelus" ever caused the Greeks. The latest news, which is, that the Weeping Virgin of Rimini is en route for our shores, (if like her sister of Guadalupe she does not positively refuse to land,) together with a winking Madonna, and a number of relics, should be enough to ensure a national thanksgiving. The fact is, we don't deserve so much grace, and if we are at all benefited, it will be the greatest wonder.

I ought not to conclude this long epistle without congratulating you on being able to have a representative of your own at the seat of government—also, congratulating the representative. If the Governor is a candidate next time, I'll certainly vote for him.

Yours,  
S. H. F.

### THE WRONG BOX.

BY "A. K. N."

Larry McAllen was clerk in a store  
Where dry goods by wholesale were sold;  
The most of his business was among the floor,  
And knocking the boxes about at the door;  
Of writing and reading he knew nothing more  
Than the cobbler that is half a year old.

Now a rich widow lady from Tipperary sent  
To purchase some merchandise rare,  
And to picking it up in a box Larry went,  
But, a little bit wrong, and he was there,  
He stumbled and fell in a box that was meant  
For a different description of ware.

All night he lay snug in a beautiful dream,  
Till morning crawled over the sky;  
Then to nail up the boxes the carpenter came,  
According to orders he fastened the same,  
And the place was so dark that nobody could blame  
If Larry he did not spy.

Then the fellow who worked all the boxes drew tight,  
And a bad piece of business he made;  
For he wrote on the box in which Larry did sit—  
"FOR MRS. M. LACRUIE: SARE CARE AND GREAT SILENCE."  
Alas for poor Larry, how soon would he die  
If that angry command were obeyed!

The box was sent on by the railroad in haste,  
In the widow's fine dwelling it sat,  
And the widow, who had a mechanical taste,  
Next morn'g on a hot-bed and quickly snored  
M. Mullin, who nered like a terrified hare,  
"Oh! snuffin'ers, what are ye at!"

The widow was horribly frightened at first  
At what seemed an infernal machine,  
Expecting to see fifty devils in a burst!  
But when she all discovered a way was the worst,  
Her fears were all ended, her doubts were dispersed,  
And her rapture was plain to be seen.

"Oh! Larry, look here!" thus she cried to her maid,  
"Come see what the machine here is!"  
I write for such things as a wicker might make,  
And faith but the fellow have strictly obeyed,  
Had I but seen you now but I'll see them well paid,  
For they give me full content!"

"Where am I?" says Larry, "Fair, darlint, you're here,"  
The widow replied with a smile,  
Cries the lad, "So I am, sure enough; but I fear  
I have sent you wrong box!" "Never mind it, my dear,  
Said Mistress M. Laughlin, and gave him a leer  
That cut to his heart like a spear."

"It's happy I am, then," M. Mullin rejoined,  
"If the goods suit your ladyship's taste,  
If ye goode you want, you'll certainly find  
That I'll put you at once, for I'm that very kind."  
"Very well, then," says she, "that's the goods to my mind,  
And now let us send for the train!"

### The Little Sisters.

"You were not here yesterday," said the gentle teacher of the little village school, as she placed her hand kindly on the curly head of one of her pupils. It was recess time, but the little girl addressed had not gone to frolic away the ten minutes, nor even left her seat, but sat absorbed in what seemed a fruitless attempt to make herself master of a sum in long division.

Her face and neck crimsoned at the remark of her teacher, but looking up she seemed somewhat reassured by the kind glance that met her and answered, "No ma'am, I was not, but sister Nelly was."

"I remember there was a little girl, who called herself Nelly Gray, came in yesterday, but I did not know she was your sister. But why did you not come? You seem to love study very much."

"It was not because I didn't want to," was the earnest answer, and then paused and the deep flush again tinged that fair brow; "but," she continued, after a moment of painful embarrassment, "mother can not spare both of us conveniently, and so we are going to take turns, I'm going to school one day and sister the next, and to-night I'm to teach Nelly all I have learned to-day, and to-morrow night, she will teach me all that she learns while here. It's the only way we can think of getting along, and we want to study very much, so as to some time keep school ourselves, and take care of mother, because she has to work very hard to take care of us."

With genuine delicacy, Miss M. forbore to question the child further, but sat down beside her, and in a moment explained the rule over which she was puzzling her young brain, so that the difficult sum was easily finished.

"You had better go out and take the air a moment, you have studied very hard to-day," said the teacher, as the little girl put aside her slate.

"I had rather not—I might tear my dress—I will stand by the window and watch the rest."

There was such a peculiar tone in the voice of her pupil as she said, "I might tear my dress," that Miss M. was led instinctively to notice it. It was nothing but a ninepenny print of a deep hue, but it was neatly made and had never yet been washed. And while looking at it she remembered that during the whole previous fortnight that Mary Gray had attended school regularly, she had never seen her wear but that one dress. "She is a thoughtful little girl," said she to herself, "and does not want to make her mother any trouble—I wish I'd more such scholars."

The next morning Mary was absent, but her sister occupied her seat. There was something so interesting in the two little sisters, the one eleven and other eighteen months younger, agreeing to attend school by turns, that Miss M. could not forbear observing them very closely. They were pretty faced children, of delicate forms and fairy-like hands and feet—the elder with lustrous eyes and chestnut curls, the younger with orbs like the sky of June, her white neck veiled by a wealth of golden ringlets. She observed in both the same close attention to their studies, and as Mary had tarried within during play time, so did Nelly, and upon speaking to her as she had to her sister, she received, too, the same answer, "I might tear my dress."

The reply caused Miss M. to notice the

garb of the sister. She saw at once it was the same piece as Mary's and upon scrutinizing it very closely, she became certain it was the same dress. It did not fit quite so pretty on Nelly, and was too long for her, too, and she was evidently ill at ease when she noticed her friendly teacher looking at the bright pink flowers that were so thickly set on the white ground.

The discovery was one that could not but interest a heart so truly benevolent as that which pulsed in the bosom of the school teacher. She ascertained the residence of their mother, and though sorely shortened herself of a narrow purse, that same night, having found at the only store in the place a few yards of the same material, purchased a dress for little Nelly, and sent it to her in such a way that the donor could not be detected.

Very bright and happy looked Mary Gray on Friday morning as she entered the school at an early hour. She waited only to place her books in neat order in her desk, ere she approached Miss M. and whispered in a voice that laughed in spite of her efforts to make it low, and deferential: "After this week sister Nelly is coming to school every day, and O, I am so glad!"

"That is very good news," replied the teacher, kindly. "Nelly is fond of her books, I see, and I am happy to know that she can have an opportunity to study her books every day. Then she continued, a little good natured mischief encircling her eyes and dimpling her sweet lips: "But how can your mother spare you both conveniently?"

"O, yes, ma'am, yes, ma'am, she can now. Something happened she didn't expect, and she is glad to have us come as we are to do so." She hesitated a moment, but her young heart was filled to the brim with joy, and when a child is happy it is as natural to tell the cause as it is for a bird to warble when the sun shines. So to the fullness of her heart she spoke and told her teacher this little story:

Mother and her sister were the only children of a very poor widow, whose health was so delicate that it was almost impossible to support herself and daughters. She was obliged to keep them out of school all winter, because they had no clothes to wear, but told them if they could earn enough by doing odd chores for the neighbors to buy each a new dress, they might go in the spring. Very earnestly had the little girls improved their stray chances, and very carefully hoarded the copper coins which had usually repaid them. They had a calico dress, when Nelly was taken sick, and as the mother had no money beforehand, her own treasure had to be expended in the purchase of medicine.

"O, I did feel so bad when school opened and Nelly could not go, because she had no dress," said Mary. "I told mother I wouldn't go either, but she said I had better, for I could teach sister some, and it would be better than no schooling. I stood it for a fortnight, but Nelly's face seemed all the time looking at me on the way to school and I couldn't be happy a bit, so I finally thought of a way by which I could do both, and I told mother I would come one day, and the next I would lend Nelly my dress and she might come, and that's the way we done this week. But last night somebody sent sister a dress just like mine, and now she can come too. O, if I only knew who it was, I would get down on my knees and thank them, and so would Nelly. But we don't know, and so we've done all we could for them—we've prayed for them—and O, Miss M. we are all so glad now. Ain't you too?"

"Indeed I am," was the emphatic answer. And when on the following Monday, little Nelly, in the new pink dress, entered the school room, her face radiant as a rose in sunshine, and facing the teacher's table, exclaimed in tones as musical as those of a freed fountain, "I am so glad!" Miss M. felt as she never felt before that it is more blessed to give than to receive. No million-aires, when he saw his name in public prints, lauded for his thousand-dollar charities, was ever so happy as the poor school teacher, who wore her gloves half a summer longer than she ought, and thereby saved enough to buy that poor little girl a calico dress.

**OLDEN TIME TAVERN RATES.**—The Wheeling Argus publishes the following copy of a record of Ohio county:

At a court held for Ohio county on Monday, the 6th day of June, 1780, Present Solomon Hodges, Ed. Robinson, James Miller, and Zechariah Sprigg, gent. The court proceeded to settle the rates for ordinary keepers. Ordered, that the ordinary keepers of this county, sell at the following rates:

For half a pint of whiskey,	5 dollars
" 1 dinner,	6 do
" Lodging with clean sheets,	3 do
" One horse to hay one night,	6 do
" Pasturage one night,	4 do
" One gallon of corn,	5 do
" One gallon of oats,	4 do
" 1/2 pint of whiskey with sugar,	6 do
" 1 quart of strong beer,	4 do

The currency we suppose, of course, was the old Continental money, which the oldest inhabitants inform us was "not worth much."

### The Beautiful Quadroon.

The Detroit (Michigan) Christian Herald, of the 29th ult., says that twenty-eight chattels arrived in that city during the previous ten days by way of the underground railroad:

"The case which has excited especial interest is that of a beautiful quadroon girl of nineteen. She escaped from Kentucky, after having been sold for \$1,500 to a sprig of obliquity, who designed to take her to New Orleans and consign her to a fate at which decency and humanity sicken. Soon after her escape, he offered a reward of five hundred dollars for her recovery, and declared he would have her if he had to 'put one foot in hell.' Such was her beauty that she would readily have brought \$2,500 to \$3,000 in the New Orleans Market. Zilla has, however, been rescued from the embrace of this putrid monster. She is safe in Canada—has entered a school, and is preparing herself to become a teacher.

### Cure for Scrofula.

Nicholas Longworth the great Catawba wine man, of Cincinnati, publishes the following in the Commercial of that city:

Pat 2 ounces of Aquafortis on a plate, on which you have two copper cents. Let it remain from eighteen to twenty-four hours. Then add 4 ounces of clear strong vinegar. Put cents and all in a large mouthed bottle, and keep it corked. Begin by putting four drops in a tea-spoon full of rain water, and apply it to the sore. Make the application three times a day, with a soft hair pencil, or one made of rags. If very painful, put more water. If not too painful, put less. As the sore heals apply it weaker. I request all editors, in all parts of the Union, and abroad, to copy this and to republish it quarterly or yearly, it may save many lives.

N. LONGWORTH.  
Cincinnati, Nov. 18, 1854.

### THE FARM: The Garden—The Orchard.

#### A View of American Agriculture.

##### CHAPTER III.

By what Processes the Earth is impoverished.

There are three principal ways in which the natural fruitfulness of the earth may be seriously impaired.

1. By removing its natural products: as when a prairie is annually mown for a series of years, and all the hay removed, and no manure or other fertilizer returned. In Europe, where forest culture is practiced, experience has shown that to remove the leaves that annually fall upon the ground to rot and form mould over the roots of trees, is sure to impoverish the land and injure its valuable products. These leaves, as well as prairie grass, contain both earthy minerals called *inorganic* matter, and combustible elements usually designated by the term *organic* matter. In burning over prairie, the latter portion of the plants consumed is alone removed from the soil; their *ashes* remain on the ground where the plants grew. Pastures are deteriorated by the loss of the grass carried off in the stomachs of domestic animals.

2. Soils are impoverished by tillage without cropping, or removing any plant whatever. No fact in agriculture is more important than this: All tillage is purely artificial and withal a most unnatural operation. Nature never ploughs, nor does the earth to promote the growth of vegetation. Her highest productiveness is the result of laws, which every farmer should carefully study and learn to follow, in the renovation of cultivated fields.

Although all tillage is a mechanical process, yet its effects are both chemical and physical on the soil. So far as the chemical results of tillage are concerned, they are quite independent of all crops and other plants. It is not so easy a task as some may suppose to explain, in a few plain words, the several changes wrought in the mould and inorganic part of soils, by the plough, spade, and hoe. The mechanical and physical effects of tillage are very obvious to every cultivator. The earth is *mellowed*—rendered exceedingly porous and admirably fitted not only to absorb atmospheric air, and all gaseous bodies, but to condense them in the innumerable pores of the friable mass. The same causes which increase the fertility of a fallowed field exhaust the soil, if long continued, although no crop should be grown upon it. If, however, a crop of weeds, grass, peas, or clover be grown and allowed to die and rot on the ground or be ploughed in, the soil will be enriched by the operation. But if a field be annually ploughed and hoed, as for a crop of corn, tobacco, cotton, or sugar-cane for twenty-five years, and no plant whatever be allowed to grow on its surface, the mechanical and chemical changes, associated as they must be with the leachings and washings of innumerable rains, would result in removing from the surface of the earth nearly or quite all its vegetable mould and the soluble mineral food of plants. To test this principle in nature, suppose a farmer were to apply twenty-five loads of well rotted stable manure upon an acre of land, and plough, harrow, and hoe the ground twenty-five years, as for crops of corn or cotton, but plant nothing and permit neither grass nor weeds to grow thereon. Would any of the dissolved elements of this manure remain that length of time in the surface

soil? Certainly not. If manure will decompose and disappear like wood consumed in a fire-place, may not vegetable mould do so likewise? And if the mineral known as common salt and salts of lime and potash will readily dissolve on the ground in rain water, and pass in a state of solution deep into the earth and reappear in springs, wells, and rivulets, may not similar minerals naturally in the soil, and rendered soluble by tillage, be also dissolved and washed out of the mellow ground into the compact sub-soil, or into swamps, rivers, and the ocean?

The principal object of ploughing and hoeing is to increase the quantity of available food for the crop; but while the elements are present in the soil and growing, it is by no means certain that all the manure or other fertilizers applied to the land, or all the elements of the crop naturally in the soil, enter the roots of cultivated plants, and appear at the harvest.

Under certain circumstances, the loss by leaching and solar influences is very large. In producing small crops of corn, cotton, wheat, and other plants, the waste of raw material is far greater in proportion to the harvest, than in large crops whose roots and foliage cover the surface both in and above the soil universally. Small corn or cotton plants, and these quite distant one from another, greatly favor the volatilization of all volatile substances and the washing away of all soluble elements.

3. Tillage and cropping exhaust land faster than it can be done in any other way short of carting off the surface soil in a mass. The degree of injury inflicted by this operation is very variable: not only on different fields, and soils, but on the same surface at different times and seasons. A light, open, sandy soil that has no clay foundation will not bear ploughing and cropping so long, with so small deterioration, as the same soil with a clay sub-soil. Light, sandy soils abound in North Carolina, Virginia, Maryland, Georgia, and South Carolina, and most of these when fresh yield fair crops. Their red clay lands are not so easily worked, but are more enduring and generally more productive.

The limestone soils of the Cherokee country, of Tennessee, Kentucky, Missouri, and other States, are altogether different from any formed from the *debris* of granite, metamorphic, and sand rocks. It is impossible to form an intelligent opinion of the exhaustion of a soil by any given amount of tillage and cropping, without knowing something of the parent rocks from which the earth was derived, and something of its physical and chemical properties. A knowledge of the principles of geology and chemistry is invaluable to one who desires to understand in advance what are the natural capabilities of any arable land; and what elements of crops it is most likely to have in too small a quantity.

It often happens that a soil partakes very little of the character of the rock that lies but twenty or thirty inches below its surface. This is owing to the circumstance that a different kind of rock has furnished the earthy matter deposited above the solid strata. In several counties in Western New York, the soft Medina soft sandstone has been comminuted and carried by tidal currents, glaciers, icebergs, or some other moving force, many miles southward, and spread over lime-rocks, hundreds of feet higher than the parent sandstones, both geologically and topographically. Although resting on lime-rock, these soils often lack lime to a degree.

The durability of a soil is governed, in an eminent degree, by its texture and hygrometric properties. Tenacious clay lands retain fertilizing salts with peculiar and remarkable affinity. When well drained and thoroughly tilled, they yield up their nutritive constituents as fast as is profitable. Where one has but a small surface to operate on, the application of clay to sandy soils is very useful. The deeper and more thoroughly one cultivates his land, removes all that it produces, and makes no adequate restitution, the faster will be impaired the natural capabilities of his soil. No matter with what skill and science a farmer extracts immense crops from his fields; the larger the amount of potash, soda, magnesia, soluble flint, phosphorus, sulphur, chlorine, and organized nitrogen, carried off in crops, the poorer his land must become, unless a part of all these ingredients be returned to the earth whence they were taken.

It is impossible to say, with any approximation to the truth, in the present infancy of agricultural science, how much of the inorganic food of plants may be safely removed from year to year in grass, milk, meat, or grain, in cotton or tobacco, from an acre of common fair land, without detriment. A little of dissolved sand, lime, potash, magnesia, sulphur, mould, and phosphorus may be spared from the poorest soils, without injury; while some so abound in the elements of crops as to furnish an amount twenty times larger, without exhausting the supply of earthy minerals. This point will be farther discussed in the next chapter.

### Frost as a Manure.

We know of no treatment so directly beneficial for almost every class of soils, as that of throwing up land in narrow ridges in the fall or early winter. There are few soils worth cultivating at all, that do not contain more or less materials which can be made available to plants by the combined action of air and frost.

Take two plots of heavy soils, side by side, and let one lie unmoved till spring, while the other is deeply plowed in autumn, and the result will be very visible in the spring crop. But the manner of plowing is important. To secure the greatest advantage, a single furrow should be thrown up and another backfurrowed directly upon it so as to produce a high ridge, then another ridge is to be made in the same manner with a deep dead furrow between the two. The process is to be continued thus through the whole field, so that when finished it will present a surface of high ridges and deep dead furrows succeeding each other, about one in two or two and a half feet. If prepared in this way, the frost will penetrate far downward, loosening and disintegrating the soil below the furrows, while the ridges will crumble down, and as they will not hold water, the air will circulate freely through them, decomposing the mineral portions, and conveying in ammonia, and other gases. This operation will be equal to ten or more loads of good manure upon clay or compact soils.

In the spring it will only be necessary to run a plow once or twice through the centre of each ridge, and then level the whole down with a heavy harrow.

Another advantage in this process is, that when land is thus prepared it dries out and warms several days earlier in the spring. Again, there are some soils that are exhausted upon the surface, but which contain poisonous substances in the sub-soil. If this sub-soil is thrown up in contact with the air and frost during the winter, these poisonous compounds, usually protoplasmic of iron or manganese, will be destroyed or changed to a harmless form, during the winter.

The above practice is especially to be recommended in the garden. One of the most successful cultivators of an acre of ground in our acquaintance, digs it up in the fall to the depth of three or four feet, making deep trenches and high ridges so that the whole acre appears to be covered high winrows of hay placed close together.

We strongly urge every farmer who has not tried this method, to lay out his plans now for experiment in this way, on a large or smaller scale, during the present season.—*American Agriculturist.*

### Good Manure, best stock for Farmers.

A Farmer "well to do" in the world, asked us the other day what we considered the best stock in which to invest his surplus funds, whether Railroad, Bank, or State Stocks? We told him he had better apply his surplus funds to the manufacture of a good manure heap, and let Railroad, Bank, and State Stocks alone. We consider it the height of folly for a farmer to meddle with fancy stocks when he has any waste or unimproved land, or buildings, or fences that need repairing, with which to use his surplus money. The doubling in stocks or interest money has always been the result of short-sightedness on the part of the farming community, especially when the money might be more usefully employed in hiring men to improve and put their lands in the highest possible state of cultivation, instead of half or quarter tilling them, as the vast majority of farmers do at present. Our agricultural friends need waking up on this point, and to be thoroughly aroused to the fact that it don't pay to work after the manner in which their grandfathers did before them, for "old fogies" is as unprofitable to them as any other class of community. Wake up, and see if it isn't so!—*New Brunswick Freeman.*

### Winter Butter.

In many parts of our country the art of making good butter in winter is very imperfectly understood, and by some dairy women thought to be entirely impossible. But it can be done in December as well as in May. The plan of doing it is this: the cows should be stabled and fed on sweet hay and other provender. Instead of keeping the milk in a warm place it should be put in a cold one, and no matter how soon it freezes, because freezing it will separate the cream much more perfectly than it will rise without the atmospheric temperature, and it can then be taken off with less trouble. And when the cream is churned the churn should not be placed very near a fire; the ordinary heat of a kitchen would be sufficient. Too much warmth destroys both the complexion and the flavor of butter. In the winter, butter, it is evident, requires more time in churning than in summer, but when patience assists the laborer, the task is man's no task at all.

Butter cured with half an ounce of salt, quarter ounce of saltpetre, quarter ounce of moist sugar pounded, used in the preparation of an ounce to each pound of butter, will be found to keep good a longer time, and have a more delicious flavor than when salted in the ordinary way.—*ibid.*