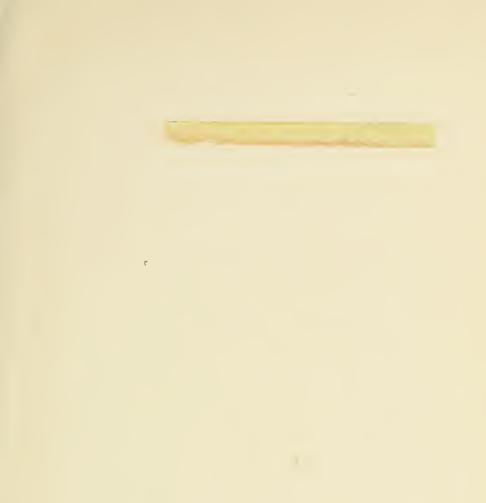


Allnois Historical Survey









Solon Robinson, about 1872 [Courtesy of Mrs. Jenny Gross, Orleans, Vermont]

## INDIANA HISTORICAL COLLECTIONS Volume XXII

### SOLON ROBINSON PIONEER AND AGRICULTURIST

Volume II 1846-1851

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  - XXI. SOLON ROBINSON, PIONEER AND AGRICULTURIST, 1825-1845 (Volume I), edited by Herbert A. Kellar

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# SOLON ROBINSON PIONEER and AGRICULTURIST

#### SELECTED WRITINGS

Edited by

HERBERT ANTHONY KELLAR
Director, McCormick Historical Association
Chicago, Illinois

VOLUME II 1846-1851

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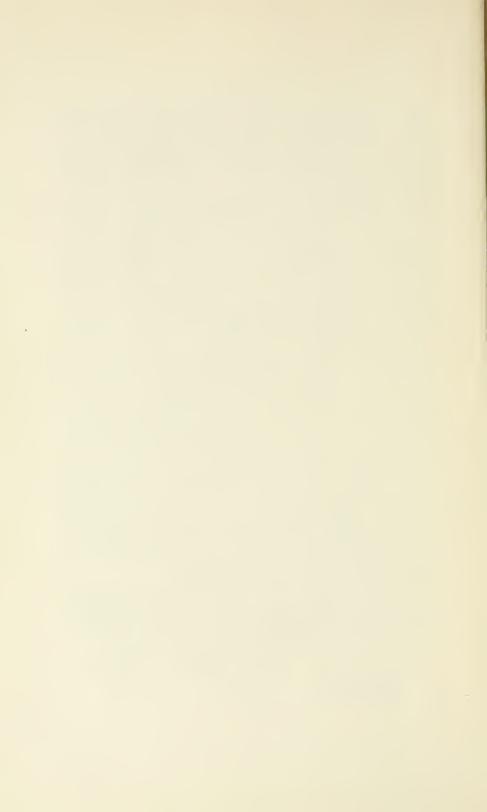
#### PREFACE

A S THE numerous illusions, with which one begins the A joust with life, slowly vanish with the march of time, it is heartening to record that the fine courtesies of the field of scholarship still abound and flourish. I allude in particular to generous aid in identifying numerous persons referred to by Robinson in the years 1846 to 1851, given by Carl R. Woodward, of Rutgers University; Julian P. Boyd, of the Historical Society of Pennsylvania; V. Alton Moody, of Iowa State College; Peter Nelson, of the Division of Archives and History of the University of the State of New York; Charles Sackett Snydor, of the University of Mississippi; Wendell H. Stephenson, John Andreassen, and E. Merton Coulter, of Louisiana State University; W. H. Tayloe, of Uniontown. Alabama; Marie B. Owen and Peter A. Brannon, of the Department of Archives and History, State of Alabama; Kathryn T. Abbey, of the Florida State College for Women; Dr. John F. Townsend and Theodore D. Jervey, of Charleston, South Carolina; D. D. Wallace, of Wofford College; A. R. Newsome, of the University of North Carolina; D. L. Corbitt, of the North Carolina Historical Commission: Wilmer L. Hall and Morgan Robinson, of the Virginia State Library; Frances M. Staton, of the Public Library of Toronto; Fred Landon, of the University of Western Ontario; J. J. Talman, of the Provincial Archives, Toronto; Pierre Georges Roy, of the Provincial Archives, Quebec; the staff of the Newberry Library of Chicago; and especially Walter Prichard, of Louisiana State University, who furnished information relative to some twenty-seven planters of his state.

My sincere thanks for assistance in the preparation of the present volume are renewed to all the individuals and institutions to whom acknowledgment was made in *Solon Robinson*, *Pioneer and Agriculturist*, Volume I.

HERBERT A. KELLAR

Chicago, Illinois July, 1936



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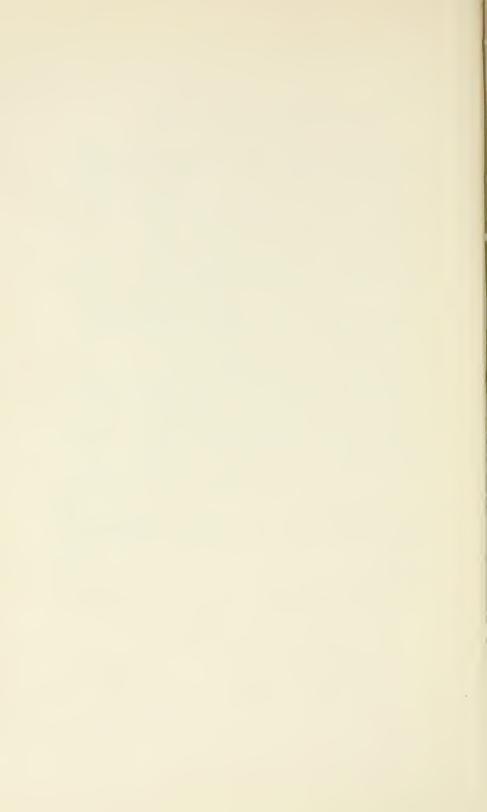
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SCRAPS FROM MY NOTE BOOK.—No. 2. [New York American Agriculturist, 5:90-91; Mar., 1846]

[January ?, 1846]

The Cherokee Rose¹ Hedge.—South of Natchez, for miles, I rode between continuous lines of hedges of the "Cherokee, or nondescript rose," then, March 1st, in full bloom, of pure white fragrant flowers, single, with bright yellow centres, and rich bright green foliage, that gave the whole a most lovely appearance; but the beauty of the scene was greatly marred by the fact that blossoms and foliage could not disguise that the whole was in a most slovenly state of keeping; for the long straggling runners have grown up some ten feet high, and bend over upon each side, till the fence is often 25 or 30 feet wide, and owing to the hardness and sharpness of the briars, is as impenetrable as a stone wall for all kinds of stock, negroes included.

Dr. Phillips<sup>2</sup> and Mr. Affleck,<sup>3</sup> who were my travelling companions, assured me that a good fence could be made in four years from the cuttings of this plant, and that by proper attention every year, it can be kept within reasonable bounds. I did not, however, see an instance where it was. I saw many places where the runners had climbed up some convenient tree at least thirty feet.

To get a fence started is a very easy matter, as it is only to take those long runners and cut them up with a hatchet on a block, into slips about a foot long, and lay these in a furrow, with one end out, and tread the earth down tight; it will be a rare thing if they fail to grow. Though, whether from failure to grow, or from being

<sup>&</sup>lt;sup>1</sup>A Chinese climbing rose (Rosa laevigata). The fragrant white blossom of this plant is the state flower of Georgia.

<sup>&</sup>lt;sup>2</sup> See Solon Robinson, Pioneer and Agriculturist, 1:465n and Index (Indiana Historical Collections, volume 21, Indianapolis, 1936).

<sup>\*</sup> Ibid., 1:213n and Index.

killed by frost, or something else, I observed in all these hedges, the same unsightly gaps that mark nearly all the live fences in the United States. These frequent gaps in the hedge are filled up with one, two, three, or perhaps a dozen pannels of rail fence, and in the joining together of the live and dead fence, holes are very apt to be left, through which that animal which strange man permits to run at large, to the eternal torment of himself and neighbors, will be very likely to insinuate his porkship about "roasting ear time."

"But why don't they fill up these gaps with new sets, if it is so easily done?"

Exactly the question that I will answer after the most approved Yankee fashion, by asking why we are not civilized, Christianized, rationalized enough to enact laws, or rather to repeal all laws, all over the Union, that compel one man to fence against every other man's cattle, some of which nothing but a Cherokee rose hedge would stop, and even that must be free from gates, bars, or gaps? And again, "if this hedge can be kept from spreading so as not to occupy four acres of land in every mile of length, and it makes such a beautiful as well as efficient fence, why is it not more extensively used?

Exactly the other question that I will answer after the same approved fashion, by inquiring why you—"what me?"—Oh, yes—you are the very man I mean—I want to inquire if you love peaches, apples, grapes, and other fruit? "Why, certainly."

Well, the hedge is not planted just for the same reason that you have never planted fruit trees and vines.

"And how far north will this rose flourish?" I cannot say; but I believe that it would be dangerous to rely upon it north of latitude 33°. Major Green, of Madison County, latitude  $32\frac{1}{2}$ °, told me that he had 60 or 70 yards of Cherokee rose hedge growing very thriftily around his yard, in the winter of 1831-2, and nearly the whole of it froze to death. In the spring he cut it all off, and but here and there a sprout came up. His house

stands on a high piece of ground—the soil, reddish yellow clay—timber, mostly black oak, rather scrubby. Whether this has any influence, or whether this plant will answer for fences further north, I cannot say; but I do say to those living further south, it is well worth your attention, and you ought to try it forthwith. And as your paper, Mr. Editor, circulates so extensively at the South, if some of your southern correspondents would give you an article every month upon this subject, it would not be too much of a good thing. It is also worth the trial whether the "Michigan Rose" will answer a good purpose at the North for hedging.

Here, upon the prairies of the North West, where it is supposed there is no timber, fencing material is altogether too plenty and cheap to think of using hedges yet awhile. But as we contrive to burn up what rails we have once a year, we shall soon come to the necessity perhaps.

SOLON ROBINSON.

#### SCRAPS FROM MY NOTE BOOK.—No. 3.

[New York American Agriculturist, 5:211-13; July, 1846]

[April 9, 1846]

Mr. Cockrill's Sheep.—This is the ninth of April (1846), a clear bright morning, but the ground is frozen stiff, and so it was one year ago this day, but it was not so where I then was, 500 miles south, but there it was cold enough to kill nearly all the peaches in the Ohio valley, and much other fruit, and some wheat.

These reminiscences are now called to mind, because this is the anniversary of my visit to the "Tennessee Shep-

¹Philips believed that, except in an extraordinarily cold winter, the Cherokee rose would thrive at least as far as 34° north, and would probably outlive the American agave, Bengal rose, and others. He described his method of filling gaps in hedges. *American Agriculturist*, 5:210-11 (July, 1846).

<sup>2</sup> The prairie rose, a climbing vine (Rosa setigera) usually having trifoliolate leaves and large deep pink flowers. Among several cultivated varieties, the Baltimore Belle is notable.

herd;" a title which some of the readers of the American Agriculturist need not to be told belongs to Mark R. Cockrill.

Mr. Cockrill's sheep walk is at and near his residence, seven miles west of Nashville, the drive to which is over one of the fine smooth Macadamized turnpikes which lead out of that city of rocks in every direction.

He was born on the banks of the Cumberland River, near the place where he now lives, some fifty-seven years ago, at which time all the uncultivated land in that region was filled with immense cane-brakes, intersected here and there with buffalo roads and Indian trails, upon which some of the early settlers paid a higher toll than we do now upon these paved ones. Mr. Cockrill is one of those western woodsmen that in his young days could outrun an Indian, or outclimb a bear. He is medium size, spare built, "smart as a steel trap," with a great flow of pleasing conversation, and unbounded hospitality, and in whose family the visitor cannot but feel at home and comfortable. He owns sixteen hundred acres of land, mostly very rough limestone hills, in places almost, and occasionally, quite bare of soil; and a small tract of very rich river bottom (interval) land. Fifteen hundred acres (counting the bare rocks), and including the woodland, are in grass, the most of which is Kentucky blue grass. He usually plants about 50 acres of corn, which affords him as much as he needs. The corn land is exceedingly rich natural soil, on the banks of Richland Creek, near the Cumberland.

The land occupied by Mr. C., is composed of twelve different farms, which he has bought up since 1835, at which time there were not ten acres of cultivated grasses upon the whole; and if the farms ever were good, it was long time ago, neither are the buildings worth bragging about. The fact is, he has been so intent upon providing pasturage and accumulating acres, that with the personal attention that he pays to his flocks, together with the care of 2,000 acres of cotton plantations in Mississippi, upon which he works 135 hands, he finds little time to devote to ornamental improvement.

When I was there, his flock, as I stated in the March No., consisted of 1,400 fine-woolled, and 600 long-woolled, and, all things considered—that is, quality of wool, weight of fleeces, size and healthiness of sheep, long life and productiveness of lambs, I think cannot be excelled in the United States. He also had forty head of very fine Durham and grade cattle, none of which were less than threefourths blood, and some of them were very valuable milkers:-30 jennies, breeding from a fine blood horse-one of the jennies is the biggest animal of the kind I ever saw-keeps about 30 high-bred horses and brooding mares, upon which he serves his big jack, and raises fine mules, one of which at work in his team is about 17 hands high, and heavy in proportion. His stock is all first-rate, except hogs, and not one of them will he keep on his place —because hogs will eat lambs. And if you ask why he don't keep them shut up in the pen, I can tell you that restraining the liberty of a hog in that despotic manner, is contrary to the free institutions of the Southern and Western States.

His flocks were at grass when I was there, but in the great drouth then prevailing, his land was overstocked and the feed poor; but he intended to shear his long wool in a few days, and start them for Mississippi, which would give him more room and feed at home. Mr. C. assured me that he takes care of this farm and stock with four field hands, assisted occasionally by some female house servants. But the wonder is accomplished by the never-tiring vigilance of the active master. I have never seen a shepherd more devoted to his business. There are few old sheep that he does not know by name on description, and can name the quality of the fleece. And he pointed out to me several ewes which I judge were Saxon Merino, that were part of five hundred lambs got by one ram in 1826, which I think a very extraordinary performance. It was accomplished by keeping the ram up, and very judiciously fed, and serving him only once to each

<sup>&</sup>lt;sup>1</sup> See Robinson, 1:549.

ewe, which was then immediately removed. Some of these nineteen-year old ewes had fine healthy lambs by their side.

The foddering season where Mr. Cockrill lives, which is about latitude 36°, does not average over three months a year. He feeds hav, millet, oats in sheaf, corn fodder, and a moderate supply of Southern corn, by one gill a day, which Mr. Allen says in his note to my article in the March No., is not so oily as Northern corn. At any rate. Mr. Cockrill finds it good feed for his sheep, and is well paid for feeding a moderate supply, by an increased quantity and quality of wool, besides the advantage of having the ewes in fine condition at the lambing season, which is in April, and after the grass has got a good start. A visit to the old shepherd is not only pleasant but profit-I have scarcely spent a day more satisfactorily than while riding one of his beautiful blood horses over his place, and examining his flocks, and listening to the interesting and instructive conversation of one of so much experience and good sense.

Mr. Cockrill has a number of sheep which he drove when he moved his flock from Tennessee to Mississippi. In 1835 he sold his cotton plantation with the intention of guitting the business, and following that of wool-growing solely, and brought up his flock and drove them to Lexington, Ky., in search of a home, which he did not find to suit himself, until he returned to his own native hills on the Cumberland. Notwithstanding all this driving in a warm climate and hot summer, he takes pride in the fact that some of his sheep on exhibition, won the prize cup, over some of the pampered flock of Henry Clay and other wool-growers of Kentucky, that fall. His original fine-woolled sheep are from a Saxony importation of 1824. His fine clip of 1844 averaged 62½ cents a pound, and was sold for shipment to France. He has some sheep which he has made by crossing Saxony and Bakewell together, that for long silky fleeces exceed anything I have ever seen. All the long-woolled sheep are sheared twice a year. In Mississippi, about 5 or 6 degrees farther south, both fine and coarse-woolled sheep are sheared twice a year. Mr. C. still prefers that country to grow wool, but not for his family residence, and he says what I have often said, that no man can succeed with sheep who depends upon his negroes—the master himself must be the slave. And this is why he keeps his flock in Tennessee instead of Mississippi; not on account of the sheep-family, but his own.

The grasses cultivated for hay are timothy, orchard and blue grass, and clover. The soil, as I have said, is strong limestone, and supported a natural growth of large timber, of oak, elm, sugar-tree, walnut, ash, hackberry, poplar, hickory, &c. Fencing timber is already becoming scarce, but whenever they shall learn how to build stone fences, they have the material in great abundance. Mr. C. trains his sheep not to jump, and if they were not so, his fences would not restrain them. object Mr. C. has in view in sending the long-woolled sheep to Mississippi, instead of the fine-woolled ones, is, that he intends to feed his negroes largely upon the heavy, fat mutton of this breed, and use the wool for negro clothing. By shearing them twice a year, their fleeces do not become burthensome, and the gain upon shearing twice a year instead of once, he finds to be fully 15 per cent. Mr. Cockrill keeps his sheep in moderate sized flocks, in summer as well as winter, with the rams always separate.

I mentioned his manner of feeding in the March No., upon the ground, without rack or trough; and I am well satisfied that it is not the slovenly way that some of your Eastern readers will be inclined to think it is. It is the natural way for the animal to pick up its food from the ground, and by the manner of feeding in alternate lots, so that the hay is laid upon the ground before the sheep are let in, they do not waste it. There is another advantage, the seed does not get in the wool as it does from racks.

It must not be supposed, because the land of Mr. C. is hilly and rocky, that it is never muddy. You, Mr. Editor, can endorse for me when I say that no land in the world can exceed some of the steep side hills of the West, that are apparently half stone, for deep sticky mud. But by shifting the feeding ground and giving plenty of room, the sheep can be kept out of the mud. There is a great error prevailing in the West, in my opinion, in confining sheep in winter in too close quarters. Give them a chance to range and browse and get their noses to the ground. They will be more healthy. Mr. Cockrill thinks it a great folly to keep a large capital in Tennessee invested in "woolly heads," when "woolly backs" afford so much better returns of interest. In fact, he is well satisfied, and so am I, that the raising of cotton so far north, will not pay any interest upon the capital investment. Indeed. taking the United States altogether, it is doubtful whether it does.

Mr. Cockrill has had a large experience in both kinds of business—raising cotton and wool; and has a very large capital now invested in both branches, and he is confident that wool-growing in Mississippi would be better than cotton, at present prices.

His figures are, that he owns 2,000 acres of first quality of cotton land in Madison County, Mississippi, and with his 135 negroes, he made in 1844, 1,035 bales, not quite 8 bales to the hand, which is more than an average crop, and which will not average over 5 cents a pound, is \$20 a bale, exclusive of freight, commissions, and stealings. Besides the land and working hands, there is a large sum invested in teams and implements, and supernumerary negroes, besides a great outlay for medicine, clothing, and provisions, over and above what is produced upon the plantation. In fact, some plantations fall short of 8 bales to the hand, and make no clothing and provisions, but buy everything. I have stated the quantity of land and flocks and hands upon the sheep farm. These 2,000 head of sheep will produce \$2,000 worth of wool a year at least,

besides all the profit of the other stock mentioned. It is easy to see which capital pays the best interest. Why, then, does he continue the cotton business?—simply, because he has not been able to get rid of it. He sold out when the business was much better than it is now, but the purchaser failed, and he had to take back the whole again. If Mr. Cockrill would tell us his experience, it would be far more valuable to your readers than these scraps and items which I have picked up by the way.

I have some more scraps of interesting matter in my notes which I have taken during my travels that I may be able to give you at a future day.

SOLON ROBINSON.

## FENCE AND OTHER MATTERS. BY SOLON ROBINSON.

[Chicago Prairie Farmer, 6:151-53; May, 1846]

[April?, 1846]

MESSRS. EDITORS: Although I do not intend to commence the office of 'commentator,' yet I am tempted to comment a little upon some articles in late numbers of your paper.

And I will commence with that in the last number upon 'Fencing the Prairie, by Mr. Kennicut.' It is one of the most sensible, plain, common sense articles you ever published.

It is passing strange that such men as Mr. K. and every other sensible man that reads such articles as that do not become completely disgusted with our whole system of fencing, and have their eyes opened to the enormous and unjust tax annually levied upon industry in fencing against "other folks' cattle"; but time alone can correct this evil, and only when our fertile prairies are needed to raise sustenance to a population as dense as that of China perhaps—for the means and method of fencing these

<sup>1</sup> Hiram Kennicut, of Wheeling, Cook County, Illinois, writer of a series of articles for the *Prairie Farmer* on fencing, prairie breaking, plowing, and wool growing.

vast timberless plains has not yet been discovered, except indeed your worthy correspondent, Col. McDonald, has furnished you the wherewithal in the "Cherokee rose hedge."

As an improvement to Mr. Kennicut's post and bar fence, I would recommend setting the fence on a ridge after the plan of Mr. Ellsworth, with a plow having a mould board six or eight feet long. But then this cannot be well done except on old ground. The bank thus made is cheap, and if sowed with grass, will last; and then three bars make a good fence.

If you had 'capped' your board fence with an upright strip over every post, nailed on with 12d nails, how could the cattle pull off the top bar, or any other one. True it will be better with split posts, and those much larger. The greatest difficulty that I find with fence posts is in consequence of the extreme softness of our rich soil that they soon begin to lean towards every day in the week but Sunday.

In consequence of this disposition of posts to go astray, I tried an experiment two years ago by using small posts, framed with a tenon into a sill about  $2\frac{1}{2}$  or 3 feet long, with braces nailed on each side. These sills lie across the fence, buried partly in the ground, and the fence stands very firm, without 'yawing' one way or the other. I believe where hauling of timber is an object, that this kind of fence will be found cheaper and more durable than setting posts in the ground. The tenons and braces will most likely last as long as common sized posts in the earth.

¹ Colonel Alexander McDonald, of Eufaula, Alabama. Interested in scientific agriculture. Raised diversified crops, but specialized in cotton. Correspondent of the Cultivator, American Agriculturist, Prairie Farmer, Nashville Agriculturist, and Southern Cultivator. For a description of his plantation operations in 1845, see American Agriculturist, 5:22-23 (January, 1846). See also McDonald's letter to editors, Prairie Farmer, 6:12 (January, 1846). McDonald died August 16, 1846. Cultivator, n.s. 3:324 (October, 1846), and Prairie Farmer, 6:358 (November, 1846).

By making this kind of fence with posts to each panel separate, and when set, fastened together with a pin, or strip nailed on, it could be moved from place to place as well as 'ladder fence,' and perhaps would be as cheap, and better.

Perhaps sod fence may answer in moist ground, for a season—I doubt its durability while frosts, rains, mice and wolves, to say nothing of cattle and hogs, are among the things that 'fret our gizzards.'

I like the looks and cost of that picket fence pretty well. I would use the posts, sills and braces that I have described, and I would split my pickets, if I could—they are cheaper and better. Be sure to nail on strips over the pickets, so that if a picket nail breaks, the picket will still be thar.

But now, nonsense, Mr. Kennicut, what is the use of you or me spending our time in pointing out the best way to fence the prairies? Don't you see that they are all to be hedged—and that with roses too? Col. McDonald, a very worthy Alabama planter, has recommended them, and sent our editors some seed. Mr. Affleck, of Mississippi, too, it seems, has some words in favor of this plant for hedging.<sup>1</sup> If their recommendation is not enough, I will give mine. I have seen many miles of Cherokee rose hedge, and a better fence cannot be. No cattle or hogs can penetrate one after it attains its growth.

The manner of setting a hedge is to make a furrow, and

¹The editor remarked: "Mr. R. has probably seen before this, that Mr. Affleck did not recommend the Cherokee Rose for hedge. It is not singular that Col. McDonald should suppose it would stand our winters, in the absence of any trial. We have heard perhaps a hundred southern men recommend it as he has done; who, in answer to our doubt respecting its want of hardihood were positive it would answer. Mr. Affleck is the first man who has ever given us any positive, reliable information on the subject. Since then, several others have confirmed his testimony. The idea of acclimating southern plants at the north is by no means an absurd one. The potato is a southern plant. And though there are certain data which determine the probabilities in a given case, trial is the only sure test."

then the rose vines are chopped on a block along side of the furrow, into cuts 8 or 10 inches long, and planted with one end sticking out, and they grow readily, and in four years will be four or fivs feet high, and as wide; and as the foliage is the most beautiful green, and the roses most perfect white, with large, bright, yellow centre. No fence can be prettier, or more delightfully fragrant in the spring.

But every thing is progressive, except trimming Cherokee rose hedges; and as the briars are so excessively sharp that that don't progress, the consequence is that the progress of growth is so rapid that in a few years the fence is 25 or 30 feet wide, and as high; and I defy all sorts of ravenous beasts to get through it. It is a good fence. No matter for the amount of ground taken up; surely there is land enough in the United States, and if not, can't we 'annex' some? As to its growing and making a good hedge upon our prairies, there is no doubt about the matter, if managed right, (for which I will give directions,) and I rejoice that the advocates of fencing our country with hedge have at length discovered a plant with which it can be done. You know I have been very skeptical upon the subject of hedging heretofore. In all my travels over the United States, while peering into every thing I could find worthy the notice of one seeking for agricultural improvement, I have seen but little hedging that could be depended upon for fence against all kind of stock.

Observing in Delaware last summer some cattle in very scanty pasture, while there was adjoining, some rich feed in stubble ground, enclosed with very beautiful hedges, I said to the owner "pray, why don't you feed the stubble?" 'Oh, the cattle would destroy my hedges, and as soon as the feed got poor, they would would walk right through into my corn.'

And that is American thorn hedge, is it, and its value as a fence, besides its liability to be destroyed by an insect, a mile at a mouthful. But that is not the case with the Cherokee Rose. It *will* make a fence if managed right. [See directions.] And what a romantic appearance our wide prairies will present while under this system of management. But now to the

Directions for growing a Cherokee Rose Hedge upon the northern prairies of Illinois, &c. As the cuttings of the rose can be obtained in any quantity from Natchez, I shall not give any directions for growing the plants from the seed: the editors of the Prairie Farmer will try that experiment and 'report progress,' and have leave to try again. I will suppose you have the requisite quantity of cuttings on hand to set one mile of fence to begin with. The ground being in good tilth, make a mellow bed about two feet wide and open a furrow in the centre six inches deep. Then take the cuttings—and mind you work with leather mittens on—and set them up in the furrow about a foot apart: haul in with hand or hoe the loose earth and squeeze it tight around the sets. They are now ready to grow. The next step necessary will be to set posts upon each side of the hedge row about four feet from the row and eight feet apart the other way. Now get 16-feet boards and board up the posts two feet high, and saw the posts off by a line level, and nail a board one inch and a quarter thick and six inches wide, on the top of the posts for plates; then put on rafters, and cover the whole with glass frames in sliding grooves. In summer time keep the frames open in pleasant weather, and closed in winter; and also bank up the earth against the boards, and keep the whole warm by hot water, stove pipes, or steam—and in four or five years you will have a most beautiful Cherokee Rose hedge in Illinois. It will add to the picturesque effect to diversify it with a few orange trees, magnolias, and an occasional patch of sugar cane.

As the glass fabric will need some further protection, it can be obtained by extending "the area of liberty" so as to bring up from the South a few slaves for that purpose. Otherwise to guard against accidents, it would be necessary to build a good substantial fence on each side,

at a convenient distance—say about four rods—so as to give room for the team to come in with wood and water. After four or five years the frames and fences might be moved ahead, and another mile put down.

Be very careful during the fall after the frames are removed from the hedge, that the adjoining prairie does not burn, as there is usually a good deal of dead wood in the hedge, which it is very difficult to remove without danger of tearing your shirt; and should this take fire it will be very likely to kill the hedge. In the spring you need not take any pains to guard against fire, as the whole concern-"lock, stock, and barrel"-will be "as dead as a herring," and "fit food for fire." In the mean time, the second experiment will be going on-unless indeed the experimenter should be fully satisfied with the experiment of fencing prairie in lat. 41-2 with a plant that will not stand the winter of lat. 32, and can never be grown here except in a hot-house, any better than can the most tender varieties of your monthly roses, which require so much care to preserve them in the parlor through the winter.

But upon the whole I don't know as it would be much more expensive or inconsistent than our present mode of splitting and hauling rails all winter, to be burnt up in the fall.

I wonder, Mr. Editor, if you really suppose you can induce "our folks" to put the "fixings" around the school house that you illustrate in your article upon that subject in the March number. Why, do you suppose that the children would learn any thing but play, if so much expense was devoted to making a play-ground, nicely fenced and set with shade trees? I suppose you would recommend the school house to be painted, and have green window blinds! And perhaps you would insist on having comfortable seats, and not put 40 children in a log cabin 16 feet square, with 16 light of glass, and *sorter* warmed by a smoking stove. Supposing you carried out all your

<sup>&</sup>lt;sup>1</sup> See "Situation of School Houses," Prairie Farmer, 6:87-88.

improvements, how do you think we could get a school-master for \$8 a month or a school-mistress for \$1 a week and "board round?" A pretty state of things you would bring about, truly. Why, sir, I thought you were in favor of economy, and cheapness, and all that. Another thing—who would settle in a neighborhood where they saw such a school house as you describe? Why, none but the most wealthy and "high larnt" class of folks, until there wouldn't be a poor man nor ragged boy in the district—and how could folks live where there were no poor folks? I guess the neighborhood of such a school house would soon get the name of "aristocratic."

Lake C. H., Ia. 1846.

PRACTICAL FACTS ABOUT PORK AND BACON.<sup>1</sup> [New York American Agriculturist, 5:282; Sep., 1846<sup>2</sup>]

[May 15, 1846]

What is the loss in weight on making pork into bacon? This question is often asked, and every farmer, particularly in the West, ought to know how to answer it. As a general and safe rule, from facts within my own knowledge, I have always contended that it is better for the purchaser to buy pork in the hog, and make his own bacon, when he can do it for one half the price per pound, than to buy it ready made. That is, if pork is usually worth 3 cts. and bacon "hog round," 6 cts., it is better to buy the fresh pork. I am writing for the West, and in Western language. That your Eastern readers may understand, I will say that "hog round" means 2 hams, 2 shoulders, and 2 sides—out of which latter the bones should always be taken. I always trim off belly pieces for lard. Hams and shoulders too are well trimmed. The

<sup>&#</sup>x27;Robinson contributed "More Facts about Pork and Bacon," to the February American Agriculturist, 1847 (6:63), and an article on "Comparative Weight of Pork and Bacon," to the June issue (6:186-87). These are not reprinted.

<sup>&</sup>lt;sup>2</sup> Reprinted in the *Daily Cincinnati Gazette*, September 23, 1846, and in part in the *Prairie Farmer*, 7:32-33 (January, 1847).

method of salting often astonishes some of the new emigrants from Yankee land. Nobody ever made better bacon for 15 years than I have, and I never use a pork barrel. I sprinkle about 2 oz. saltpetre and 6 lbs. of N. Y. salt to a hundred of pork, piled up on a bench, or in the corner of the smoke-house, like a pile of bricks. I let it lie about as many days as the hams weigh pounds each overhauling once. Then hang up far away from the fire. in a very open and airy smoke-house, and smoke well with hickory or other sweet wood. Then draw loose cotton bags over each joint, and tie round the string by which the meat hangs. Do this before the flies come in the spring, and you may let it hang as long as you like, and it will be good—at least, mine is so. For many years our house has not been without a supply of this most excellent kind of meat, which is a much more healthy food than the eternal round of fresh beef, &c.

But to return to my subject. On the 20th of January, 1846, I killed 5 hogs, about a year and a half old, and one about half that age, of the Berkshire and China breed, fattened upon corn fed in the ear, the quantity not counted, as it was too cheap to regard that.

The following table will show the weight of each hog, and the weight of each piece of meat cut for bacon.

Hogs.	Hams.	Shoulders.	Sides.	Heads.
312 lbs.	30 lbs.	32 lbs.	44 lbs.	23 lbs.
	30 ''	30 ''	38 "	
308 "	29 ''	34 ''	40 ''	21 ''
	30 "	35 ''	38 "	
295 "	30 "	35 "	37''	19 "
	32 "	35 ''	34 ''	
289 "	29 "	29 ''	34 "	21 "
	27 "	30 ''	38 "	
259 "	27 "	23 "	26 "	21 "
	27 "	24 "	26 "	
181 "	20 "	19 "	19 "	
	20 ''	22 ''	19 "	12 "
1644	331	348	393	117

Scraps, &c.—21 lbs. of feet; 213 lbs. of sausage meat, and ribs and back bones and trimmings off; 150 lbs. of leaf lard and fat trimmings; 71 lbs. loss in cutting, and difference in weighing; 331 lbs. weight of 12 hams; 348 ditto 12 shoulders; 393 ditto 12 sides; and 117 do. 6 heads:—1644 lbs.

This pork when killed was worth 3 cts. a pound—I will say it would only shrink the 44 odd pounds in taking to market, at which it would amount to \$48. The lard tried out 129 lbs., a most beautiful article, the scraps not being much squeezed, as that would rob the good wife's soap tub.

On the 28th of April, the bacon being well smoked and dried, was ready to bag up. I weighed it, and found that the twelve hams weighed 304 lbs. (loss 27); 12 shoulders. 331 lbs. (loss 17); 12 sides, 259 lbs. (loss 34); I am inclined to think that an error of 10 lbs. was made in the weight of the shoulders, as I have heretofore found the per centage of loss about the same on these as on the hams. I will therefore throw off ten pounds on these, and we have 1.113 lbs. of bacon and lard in good weight and order, for market, which at 61/4 cts. a pound, which is a fair average price, will come to \$69.56. The heads and sausage meat are worth one cent a pound. \$3.30; 24 feet, 14 cts., will make an even sum of \$73; from which take the \$48 price of hogs before cutting. and it leaves a very pretty little sum to pay for a dollar's worth of salt and saltpetre, and the little trouble of handling. But it must be small-boned fat hogs, as these were, to do it. In this case I could sell the bacon and lard at 41/2 cts., and be well paid for trouble and cost of making bacon, because the heads, &c., are worth much more than I stated them at in any family.

The principal object in this statement is to inform those who have had less experience in this matter than I have, whether it is most advantageous to sell their hogs fresh, or cut and salt; and for that purpose I have endeavored to be accurate. Each person in his own place

will judge of his own market and relative prices, and if his hogs are not so good as mine, make greater allowance for loss and offal.

Will someone who keeps a pork barrel, make a similar statement, and publish for the benefit of your readers?

Solon Robinson.

Lake C. H. (now called Crown Point), Ind., May 15, 1846.

REVIEW OF THE SEPTEMBER No. OF THE AGRICULTURIST. [New York American Agriculturist, 5:374-79; Dec., 1846]

[September ?, 1846]

French Mode of Making Apple Butter.—Now, with all due deference to French cooking, I do not believe that this French dish is a better condiment than the old-fashioned Yankee apple sauce, when composed of three-fourths rich, sweet apples, and one-fourth quinces, thoroughly cooked in good sweet cider, after boiling five gallons into one. [Neither do we, and we wish we knew where we could get a half barrel of it for our winter supplies.] I am sure the domestic is the best, but let those who can, try both. Who will tell how the western or southern apple butter is made? In a journey we once made from Massachusetts, through those states, we found this article good and cheap. [We hope some of our readers will answer our correspondent in the matter of apple butter.]

Preservation of Apples.—Strike out from the directions for packing all the articles but the sand, and be sure it is very clean, very dry, and that it fills all the interstices so that no two apples touch. Any warm upper room is better to keep the cask in than a cellar, unless it is a very cool one, and unusually dry. It will take a very hard frost to injure fruit so packed. All kinds of vegetables may be preserved a long time fresh in the same way. I

<sup>&</sup>lt;sup>1</sup> The post-office designation was not changed from Lake C. H. to Crown Point until June 26, 1845, although the new name had been used locally since late in 1840.

have known potatoes so kept at sea, much longer than any other way. One voyage in particular I recollect, our decks were often swept by the sea breaking over them, and leaking down through the hatchway among the potatoes, endangering them by the moisture. Who knows but potatoes might be kept thus from being affected in winter by the rot? [We doubt whether sand-packing would preserve them, but are confident fine charcoal dust would. The latter would also be a much better preservative at sea, as it is a great absorber of moisture.] Such articles as these are among the most valuable of a work like the Agriculturist, but the directions should always be very plain and simple, and, above all, correct.

Importation of Pure-bred Merino Sheep .- I am well pleased that we have got one importation of pure Merinos, about which there can be no dispute. It is pleasing to see such a devotion of wealth to such a national object of benefit to the cultivators of American soil, as this act of Mr. Taintor,1 who is entitled to receive a meed of praise from all the friends of agricultural improvement in the country. It is a great pity that many other men of wealth do not "occupy their leisure hours with as useful a hobby." It is my opinion that this kind of fine-woolled sheep, taking all things into consideration, are the very best of any in the United States for profitable woolgrowing. Though, indeed, I entertain serious fears that, under the new tariff, that branch of American industry is destined to be prostrated. [We have no fears of the kind. We will turn out American intelligence, industry, and perseverance, in growing wool, against the whole world, tariff or no tariff.

Patent Fence.2—I do abhor this disposition to patent every new thought. In fact, this is not new, and is un-

<sup>&</sup>lt;sup>1</sup> John A. Taintor spent fifteen months in France, Spain, Saxony, Prussia, and Austria examining sheep. He brought home four Saxon bucks and four ewes and three Merino bucks and twenty-three ewes. *American Agriculturist*, 5:266.

<sup>&</sup>lt;sup>2</sup> Posts made of the same composition as common bricks, burnt or baked to consistency of hard arched brick. *Ibid.*, 5:267.

worthy a patent. I have thought and talked of the same plan years ago, but gave it up as worthless. The interest on the cost extra over wood posts, will amount to enough and more, than to pay for replacing them. I cannot discover "its cheapness." And unless made very heavy, these posts will not prove "imperishable." They are not so strong as stone; and unless very hard burnt, will rot about as soon as locust or cedar timber, and be very likely to be broken by frost. If this country must continue for ever to be taxed one hundred millions of dollars a year for useless fencing, the sooner we commence building iron fences the better. (See January No., page 171.) I mean my language to be plain enough to show that I am not "on the fence."

Symptoms of Disease in Animals.—Will you please to tell us where to feel the pulse, and how to know whether it is "full and frequent," or not? Otherwise this article is not of much practical benefit to us unlearned diggers of the soil. Veterinary surgical knowledge is at a very low ebb in this country. [The poets say, "there is a pulse in every vein;" so now, Mr. Reviewer, we think you will be at no loss to find it. If you are, call upon the arteries; and if you cannot find these, the next time you skin an animal, just map them out on a paper or wooden animal, and set the same up on your kitchen mantel-piece for the study of yourself and family. All this is easier done than plowing straight lines.]

Use of Gypsum, &c.—Although you "presume that most intelligent farmers are perfectly acquainted with everything concerning it," I assure you that not one-tenth of them know anything about it. To many of your readers, I presume your remarks of its uses and benefits will be new; and it will also be new for them to learn, that by using a small quantity of gypsum at a trifling expense, they may absorb and prevent nearly all the unpleasant smell of a privy, &c. Will one in ten do it? Tan bark applied daily will effect the same purpose; so will ashes or lime in a great measure.

Anderson's Patent Hammer.¹—Of all the improvements ever made upon this important and indispensable little tool, this last is undoubtedly the best. The greatest wonder is, why it was not thought of before.

Tomatos.—Of all the modes of cooking them there is none quite equal to "our way." Scald and peel them; then stew them in their own liquor a long time, till there are no lumps; then add crumbs of dry bread to absorb nearly all the juice. They are good when first cooked while hot, and equally good when cold, or when warmed up again, morning, noon, or night. In fact, I may say of them what the sublime poet says of another standing dish:—

Bean porridge hot, and bean porridge cold, And bean porridge best at nine days old.

Dandelion Coffee.—What! that common plant that grows in everybody's door-yard? Is it a fact? Who has tried it on this continent? Anything that will help to stop the enormous consumption of coffee in this country, I shall look upon as a great blessing and saving of health and life.

The Alpaca.—This is a very interesting article, in which much useful information is conveyed in a concise form; and if passed over by the reader might as well be referred to again. By the by, what of the project for importing alpacas? Will it fall through for want of funds? I shall feel ashamed of my country if such is the fact. It does not seem probable to me that the alpaca or any cross from them will ever be used in this country as beasts of burden. Although very useful in the mountains of Peru, where it is necessary to carry packages over regions entirely destitute of roads, I do not think they would suit this railroad region of go-a-head-i-tiveness, where every man has, or may have, a good carriageroad by his door. Though I must acknowledge that many

<sup>&</sup>lt;sup>1</sup>The claw was to be bent back to the handle, clasping it with a strong ring. American Agriculturist, 5:269.

of said roads are very rough ones, and show that the dwellers thereon are but a small remove above the uncivilized llama-drivers of Peru.

Manure.—Will manure deteriorate if kept under a shed, or if well piled up out of doors? If lime, gypsum, ashes, or charcoal, were mixed with the heap, will it "undergo a degree of combustion and become dry rotten, mouldy, and useless?" In using fresh, hot stable dung, I never have found any difficulty if plowed in deep. The best way to do it when much mixed with straw, is to spread it upon the ground before the plow, and then let a boy follow with a rake and rake into each furrow the width of the next.

To Prevent Smut in Wheat.—It is truly strange that smutty wheat should ever be grown, when it can so easily and certainly be prevented. The most expeditious way to wash a quantity of wheat is, to have a large trough full of brine; let the wheat be in a tub or basket at one end, where the washer can dip it up conveniently into a sieve, a small quantity at a time; plunge the sieve suddenly down into the brine, and nearly all of the smut will rise up and float over; then empty the wheat into another tub of brine, and the remainder of the smut, if any, will float; brush away to the other end of the trough the floating smut, and repeat the operation until your second tub or trough needs emptying. I don't think it will need to stand and soak, and I don't think you can grow smut from wheat so treated. Dry your seed as directed, with lime, ashes, or gypsum.

Side-hill Plows.—Ruggles, Nourse & Mason, manufacture a very strong and easily worked implement, which needs only to be seen to be appreciated. There are fifty thousand of them needed at this moment in Mississippi, Alabama, Tennessee, and Missouri, upon the soft easily washed side-hills of those states.

Repeal of the British Corn Laws.—You and I, Mr. Editor, differ very widely in our appreciation of the benefit likely to be derived by American farmers by this act of

Great Britain. As a philanthropist, I rejoice to think that the half-starved English and Irish slaves may partake of some of the blessings enjoyed by our American slaves. For, among the latter, suffering, for lack of food. is almost an unknown thing. I most sincerely wish that the British starvelings could have a goodly share of the eatables of this country that daily go to waste; or, the good, rich food that our hirelings turn up their noses at. and would utterly refuse to live upon. I do not dispute your axiom that there is a tendency to produce a surplus of grain in this country; but I do say, that it would place this country in a far more prosperous condition if there was sufficient inducement for that portion of the population which tends to create that surplus, to engage in other pursuits to an extent that there would be a home consumption of all the agricultural products of our fertile soil. If the cultivators of American soil are only to look to a foreign market for their surplus productions, it will take more millions than there are in your arithmetic to compensate them for their loss of a home market. Again. all the exports of agricultural products, even should it (which I doubt) amount to \$20,000,000 a year, will be returned to us in the manufactured products of pauper labor, such as every country should always make at home. While it is recollected that those engaged in the carrying trade are "consumers," that a goodly number of them are foreigners, and that a very much larger number of consumers would be engaged in carrying the surplus coastwise, for the home consumption of home manufacturers of home-grown raw materials, into fabrics to export, instead of exporting the raw material and food for others to use to gain a power to level the agriculturists of this country down to the same level as the serfs of overgrown British land monopolizers. "Hence the disastrous effects" can and will be as "great as apprehended by some;" and while "many of our farmers will grow richer by the sales of their produce" to English manufacturers, many, very many more, will grow poorer in consequence of the repeal

of our own and British tariff laws. We shall see. [We think our correspondent has slightly misapprehended the tone of our article. We simply congratulated the American people, and those of Great Britain and Ireland, upon the repeal of the odious duty on corn. In stating the advantages of enlarging a foreign, we said nothing of the home market, of the importance of which no one has a higher estimation than ourselves; and we would do everything which we thought just and honorable to extend it. Do we understand Reviewer to assert that enlarging the foreign is likely to curtail the home market? If so, we should be pleased to know how this is to be accomplished. We are of opinion that taking off the late duty on corn, in Great Britain, will add at least five cents per bushel to its average value in this country, for the next ten years to come. Admitting the product now to be 400.000.000 bushels, this would be a gain to the country of \$20,000,000 per annum. Previous to the duty being taken off of cheese. in Great Britain, in 1841, we exported to the United Kingdom next to nothing; and the price had got down in our own country to 3 and 4 cents per lb., for a prime article, thus making it a losing business to the dairyman. Now that same article is worth fully 7 cents, and upwards: and one million pounds of it were exported, during the last week in October, from this port (New York) alone. Would Reviewer leave us to infer that this was going to benefit the pauper population of England, to the injury of the American dairyman? No; we will do him the credit to believe that he would draw no such conclusion; and yet we are sanguine in the opinion that corn and cheese will prove a parallel case.

Foreign Cattle.—I agree with you most cordially, neighbor Bement, that we have imported enough at present. If we rightly improve those we have, we might better become exporters than importers. We might just as well import our wheat and potatoes, as any more cattle. Many now have learned to think that nothing American is good

<sup>&</sup>lt;sup>1</sup> See Robinson, 1:131n and Index.

enough for their perverted taste. We have the seed, and if as good cattle cannot be grown upon our soil as that of Great Britain, let us acknowledge the fact, and own our dependence again upon our old mother for all the common necessaries of life.

Southern Agriculture.—Perhaps it is as your correspondent from Louisiana1 thinks, "almost useless for any one to waste paper and ink to write to the southern planter," &c., because he won't read. If your "plantations are too extensive to manure thoroughly," throw away onehalf or three-quarters, and treat the remaining part rationally. The fact is, your system of rushing everything is your ruin. I don't know how it is with you, as I have never visited your immediate locality, but I know in many of the cotton plantations, the most destructive system of farming is pursued that I ever saw. The timber is barely cleared from the land before the soil is literally washed away down the steep side-hills, and the land spoiled for ever! Perhaps your land at "Redwood" is level, and only in danger of being worn out by the eternal round of cotton after cotton every year, which you cannot prevent, because you "have no time to haul large quantities of manure to the field." But I tell you that you do not need to haul manure; your land can be kept in good condition for ever by green crops plowed in, and by doing all your plowing twice as deep as you now do, which I venture to assert is not over two inches. If you think differently, I beg you to go into your fields unknown to the plowmen. and stick down a dozen pegs two inches below the surface, and then follow the plows and see how many they will plow up. If the present low price of cotton continues, it will drive you to cultivate other crops, which, if not otherwise profitable, will save your soil from utter prostration. I have seen as fine Cuba tobacco grown a hundred miles north of you, as ever grew upon that Island. As for the assertion that northern farmers would be as bad off as your southern farmers now are. I cannot

<sup>&</sup>lt;sup>1</sup> James S. Peacocke, of Redwood, near Jackson, Louisiana.

agree to it. Look how they are renovating some of the worn-out lands of Virginia. When your present exhausting system of farming in Louisiana has ruined the land, and its present occupants, northern farmers will then come and grow rich, where the system of starving the soil has ruined the owners. These are facts, however useless it may be to write them to southerners. But I am glad to see that one planter, the writer of the article under review, is in a fair way to be benefited by reading the Agriculturist; and it is a great pity that many others could not be induced to follow his example in both reading and writing in agricultural papers.

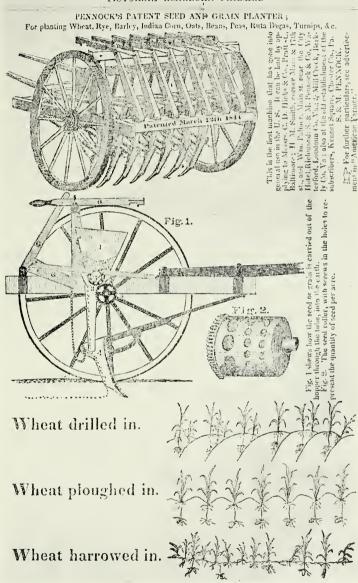
Removing Stains from Cloth.—This is one of those plain, concise articles, that all grades of intellect can understand. It is the many such useful articles as this that gives great value to your paper. I like them.

Yellows in Peach Trees.—No doubt the cure is effectual. But I wish to know whether it would not also answer to cut them off even with the ground, and then the roots will sprout up and make new trees?

Management of Honey Bees.—I have only one remark to make upon this article. Mr. Miner condemns beehouses in toto This is so contrary to old custom that I cannot at once agree to it. My bee-house is simply for the purpose of sheltering the hives from sun and storm, and I have never experienced the difficulties mentioned. But if Mr. Miner's plan of hanging up hives in the open air is best, it certainly is cheapest. But pray, Mr. M., do your hives never warp and crack, and leak water; and is the sun not too hot without any shade whatever? Let us hear further from you on this point, and in a more serious mood.

Sowing Machine.—For seeding, I prefer Pennock's, for that plants and covers; but this may do well for spreading plaster, &c., which that would not. But this costs too much, and I think it can be simplified and cheapened. Construct the upper roller in the figure so as to serve for the axle, and by being made fast in the hubs of common

## PICTORIAL AMERICAN FARMER.





wagon wheels, revolve with them. Geer from the axle direct into the cylinder. Have a revolving band on the centre of the axle, to which the coupling rod can be attached, and then the whole of the sowing apparatus can be attached to a common wagon, and not cost over \$20. If the present machine is patented, my improvement is not; so all creation may use it if they like. There is no doubt, in my mind, about the feasibility of the alteration.

Colic in Horses.—The recipe is very good, but the difficulty is to know whether the complaint is colic. I have seen a good many horses die with a complaint that appeared like colic, which no medicine on earth could cure after the horse showed symptoms similar to colic. The directions for prevention are therefore the most valuable of the two.<sup>2</sup>

The Superior Corn Bread, found at Bement's Hotel, I have eaten there, and endorse "good;" but I have eaten the superior of it made in a southern negro cabin, with meal and water only, thoroughly worked into stiff dough and palatably salted, then laid between two cabbage leaves and buried like a potato to roast in the hot embers of a wood fire. Such corn bread is good—cheap—easily made—but never grind the meal fine. This is where the English will fail—they talk of "flour of Indian corn;" that spoils it most surely.

*Succotash.*—All right Mr. Farmer and Gardener. Hope all your readers have got the pork, and will follow your plain directions to cook this excellent dish, which is often spoilt in making

Adulteration of Milk.—There is but one way that I can see which will be likely to secure us pure milk in the city of New York; and that is, by establishing an extensive milk company under the surveillance of the police, sub-

<sup>&#</sup>x27;It prescribed "a strong decoction of soot tea, to which add half a pint of whisky . . . if relief is not obtained in a few minutes, give an injection of soap suds, with a gill of strong decoction of tobacco, and a little salt added." American Agriculturist, 5:277.

<sup>&</sup>lt;sup>2</sup> The preventive called for lime, salt, ashes, or salt water used in the food. *Ibid*.

ject to a forfeiture of their privileges if ever found selling adulterated milk. Having a large number of regular customers, it will be the interest of the company to sell nothing but pure milk, and certainly the interest of purchasers to buy from no other source This combination would brush down dishonest dealers. The subject is worthy of further thought and discussion.

Wheat in Georgia.—I am well aware that good wheat crops can be grown in all the Southern States; but I wish to inquire of Mr. Terrell, how the grain can be preserved from the destruction of the weevil, which so infest all the country south of latitude 37° or 38°, that I have ever visited? If they do not infest Georgia, and wheat can be profitably grown there for "371/2 cents a bushel," it is cheaper than it can be grown upon the boasted prairie lands of the West, maugre a late article in the New York Journal of Commerce, asserting that it can be grown for 16 cents! Mr. Terrell is an observing and interesting correspondent; but I would recommend to him to take great care that his observations made while travelling by railroad, are not erroneous. We have too many railroad travellers' publications now-a-days. His observation upon the true policy of the South to raise her own provisions, is worthy of all credit, and should be much more generally practised. But when that becomes the case, several of the North-western States will feel the loss of a home market, and at the same time learn that they have no foreign one. [Dear Reviewer, don't be so certain of that fact, otherwise we fear we shall be obliged to suspect you as one of the Editors of the New York Tribune.]

Drovers' Dogs.—This cut is not quite "as clear as mud," though somewhat muddy; for to us unlearnt in dogology, we are not able to distinguish "Boxer" from "Rose," and therefore it is not so interesting as

Domestic Fish-Ponds, with its clear, beautiful illustrations, and very lucid description, by an excellent writer, whose new work upon the "Trees of America," I will read

<sup>1</sup> William Terrell, of Sparta, Georgia.

with pleasure, whenever the author sends me a copy. [You shall have one *gratis*, if we have to send it ourselves.]

Practical Facts about Pork and Bacon.<sup>2</sup>—This is from a prolific pen, from whence flow a great many practical facts upon a great many interesting subjects, and upon this one he writes exactly as though "he was brought up among the hogs." That this article is an interesting one, is proved by the fact that it is "taking the round of the papers."

How to Destroy the Canada Thistle.—This is all very good doctrine; but how are you to induce "every man to weed on his own side of the fence?" Weeds in fence corners, is another of the evils of our wretched system of fencing, which has not been sufficiently adverted to by the advocates of cultivating land without fence. And until that day of wisdom arrives, I, for one, despair of ridding the land of this troublesome weed, as well as many other of the evils of the system of compelling one man to fence against everybody else's cattle. Be assured, "old farmer," that although you may "chisel" out the thistle, a thousand others will not; and "faith without works" will never rid the country of the Canada thistle, any more than in the negro's sermon it could make "de hog a gemman in de parler."

Imported Cattle.—I have said my say in remarks upon Mr. Bement's communication. Mr. Vail is a very enterprising friend of improvement, and has a beautiful herd of cattle; but suppose you admit similar articles from

¹Daniel Jay Browne, The Trees of America; Native and Foreign . . . (New York, 1846). Author and compiler of numerous agricultural and scientific works. Employed in the agricultural warehouse of A. B. Allen & Co., New York, and also as assistant editor of the American Agriculturist, 1845-1851. Connected with the census and patent offices at a later period. See sketch in Dictionary of American Biography, 3:164-65; also post, 37.

<sup>2</sup> See ante, 17-20. Robinson was apparently trying to prevent his

recognition as "Reviewer."

George Vail, of Oak Grove near Troy, New York. President of Merchants and Mechanics Bank of Troy. Director of a railroad from Troy to Ballstown Spa, 1832. Wholesale dry-goods merchant,

all the eminent stock-breeders in the country, including pedigrees, would it be interesting to the great majority of your readers? The half-dozen lines in your August No., with the addition of the importer's name, is all the space that should, in justice to your paying readers, have been occupied by this subject.

Private Agricultural Schools.-Well, if you "cannot agree with Reviewer," we will not quarrel. Your politics, which you proclaim in this article, are so different from mine, that it will probably be useless for us to attempt to "hitch our horses together." I believe the object of all governments should be to foster the interests of the people governed; and to collect and concentrate resources to accomplish great works, for great good, by a great combined effort of the whole people, through the agency of the rulers acting as managers for all the individuals, that no one individual can do. And I do not consider myself a bad citizen, though you do, because I advocate this "plain political axiom." But while you deprecate all governmental endowments of schools, why do you advocate "an annual appropriation for the collecting of materials and sending forth substantial public documents. containing real information to the agricultural community in regard to their business." The late bundle of trash from the Patent Office, I suppose you consider a substantial document of the class you wish to patronize. Verily, friend, thou art inconsistent, and I fear somewhat

1807-1835, when he retired and devoted his time to stock raising. Vice-president of the New York State Agricultural Society, 1854; president, 1856. Restricted his cattle to pure Shorthorns. Exhibited at Rensselaer County Agricultural Show, October, 1843, and at the State Agricultural Show at Albany, 1850. Contributor to the Cultivator, American Agriculturist, and The Plough, the Loom, and the Anvil. Anderson, George B., Landmarks of Rensselaer County New York, 232, 256, 258, 318, 351 (Syracuse, 1897).

<sup>&</sup>lt;sup>1</sup> A.R.D. of Hackett's Town, New Jersey, advocated private enterprise in agricultural schools, fearing the entrance of office seekers and political speculators if the government took over their administration. *American Agriculturist*, 5:284-85.

agrarianish in thy principles. At all events, thou art not well versed in true political economy. "Let us have no national school," you say. Then let us have no national monopoly of the public domain, which instead of converting the proceeds into schools, and roads, and harbors, for the benefit of those who pay their money for them, have diverted every dollar so wrung from the hard toil of the poor pioneer in the forest, for the cut-throat purpose of "glorious war," upon a defenceless people, to gain more territory to devote again to the same purpose. But this is not, I suppose, in your opinion, "beyond the proper sphere" of government.

Dr. Philips' Reply to Reviewer, is an interesting article, and I feel pleased to think that I have been the cause of drawing him out so fully. Still, he might have written more lengthily upon the several inquiries made, with equal interest. I am sorry to think from the closing paragraph of the Doctor's letter, that perhaps he thought my remarks were too much in a vein of ridicule, for an entire stranger to indulge in. But the truth is, he is no stranger to me, and I know he loves a joke and would laugh heartily now if he could "ferret me out," and learn how I know that peas "have a haulm."

Gardening, No. 7, should never have been thus entitled; for, although an interesting article upon geological science, it has not one word upon the science of gardening. "In uncultivated grounds, soils occupy only a few inches in depth of the surface," is an old theory that may be true in Europe when it was first written, but it is not so when applied to millions of acres of American soil; which, in some of the western states, is deeper than the plow ever runs. I do not believe that "every gardener or farmer who know the sorts of plants naturally produced upon a soil," would be able to determine its value for cultivation. I recollect being told many years ago in Michigan, while "land hunting," that wherever I found the burr oak, I should find warm, rich, sandy land; and vet. in truth. I found it afterwards growing upon poor, cold. hard, clavev land. So "these plants are not absolutely to

be depended upon;" in fact, only in extreme cases, not to be depended upon at all.

Wool-growing in Western New York.—I like this kind of articles. In reviewing it I wish to ask Mr. Peters a few questions, which I am sure he will answer freely, to make his statements more plain to some of us dull-brained city dwellers. You state that we can buy farms at \$10 or \$12 per acre, that will carry "300 sheep to every 100 acres of cleared land;" but do you in the cost make allowance for woodland? Would not that be included in the price, and, of course, add to the capital? And, again, you allow no chance whatever for a poor man, or one even with \$3,000 or \$4,000, to engage in wool-growing in western New York. Must all of that class be driven to the prairies of the west? Now, it appears to me, if no man with a less capital than \$14,000 can profitably engage in the business, that very few will undertake it without a better show of figures than yours. The truth is, that the capitalist can make "11 per cent." so much more certain and easy, that he will not engage in the laborious business of a sheep farm, without a prospect of much larger profits. Will twelve tons (and what kind) of hay without grain, winter 100 sheep? Is 20 acres of pasture, on an average, not a small allowance? Do you pasture meadow and grain fall or spring?

Feeding Large Dogs in Town.—If with the first feed described, you will give nineteen twentieths of these dogs, each a sixpence worth of strychnine, it will save much future expense, and add greatly to the comfort of many thousand citizens, and still leave all the dogs that can be of any possible advantage to their owners or anybody else—dogs included!

Ladies' Department.—Not a word to say. I dare not look under that—what-d'ye-call-it? and I cannot see the beauty of the thing unless I do. So I will pass on to the

<sup>&</sup>lt;sup>1</sup>The article referred to described the construction of a "parapetticoat" from a parasol and a petticoat, to be used to cover a rosebush while green flies were smoked out. *American Agriculturist*, 5:289.

Chapter on Grasses, which is well calculated to give correct information to the boys. But, pray tell me, which is the real Kentucky "blue grass," Poa pratensis or Poa compressa? [Botanists have decided Poa pratensis.] What is called blue grass in New York is a different grass from that which is so called in Kentucky. If "E. L." will write an article giving a plain description of each kind of hay and pasture grass—when sown—growth—size duration—use, &c., and the editor will illustrate with cuts [we will do it], it will be a very valuable article for the Boys' Department of this paper. I think that the distillation of spirit from the seeds of several of the true grasses. as well as from the juice of the sugar-cane grass, is no less "useful" than the production of hay, bread, beef, pork, paper, hats, mats, bags, and ladies' bonnets, all of which are made of the "grass of the field that perisheth." And yet I am a strict temperance man. But I know that distilled spirit is one of the blessings of civilisation, and for many purposes not only useful, but almost, perhaps wholly, indispensable. How dreadfully is this good gift abused!

Boys, be Kind to Domestic Animals.—I could write a long sermon from this text; but when done it would not comprehend more meaning than those six short words. Let me but learn the natural disposition of a boy to be cruel to domestic animals, and I will paint his horoscope most truly; but it shall be an unenviable picture for him to look upon. Very likely the prison and gallows will form the end of the view. No trait in a child's character is more displeasing to me. No nation of people, except some of the very lowest grades of African barbarians, attempts to live without the use of domestic animals. Let them ever be treated kindly in all respects.

Foreign Agricultural News.—Here I find an article from the Gardener's Chronicle, upon the subject of substituting other seed wheat, with a view of shortening the growing season, and consequently bringing on the harvest in summer instead of autumn. I should like to know

what is the reason our winter wheat cannot be grown in England, and whether the experiment has been thoroughly tried with seed from this country? In this country, our seeding is done before the harvesting in England. What they call spring wheat there, which I believe is usually sown in February, when brought here, becomes winter wheat, and must be sown in autumn to perfect its seed.

Pulling Flax.—The directions will answer as well for this country as England. But there is so much labor attached to growing and preparing flax for the spinner, that other crops will usually be found more profitable here than flax, except when grown exclusively for seed, and then it need not be pulled.

Making Rhubarb (pie plant) Wine, or preserving it, I cannot see the object of here where we have so many other better things.

Bones Dissolved in Caustic Ley.—It seems curious that it should be necessary to publish this fact, known to every "old woman" who ever made soap, and much more curious that it should have ever been the subject of a patent. But that was in England, where one is restrained by an excise law from making his own soap out of his own bones, grease, and ashes.

The Potato Disease.—The remarks upon this go to prove to my mind, that the cause of this lamentable malady lies beyond the reach of all human skill; and I fear it is destiny that we shall no longer depend upon this crop as a means of sustaining animal life. I sincerely hope that my presentiments will prove false. I cannot read an article upon the subject without having vivid pictures of human suffering presented to my mind.

The Editor's Table is not as sumptuously furnished this month as usual, and so we can the sooner pass over it.

Results of Hydropathy seems to be the most tempting dish to a cold water man. This is undoubtedly a good curative system; but like a great many other new systems, it claims too much—so much, in fact, that the whole

is pronounced a humbug. I have myself experienced relief from a medicinal application of cold water upon the spine, for neuralgia; but it is far from infallible. Your recommendations of ablution as a *preventive*, ought to be rigidly practised, and although I doubt its effect to drive away "nine-tenths of the diseases" of the human family, it might affect one-tenth, and would be so much clear gain.

Life in Prairie Land.—As you say the fair authoress is an acquaintance of yours, and as you are a bachelor, I am somewhat afraid to trust to your recommendation without an endorser. If you had told us whether the lady had been an actual dweller [she was] in the land she describes, we could have formed a better judgment of her ability to describe the wild scenery of that wild country.

French Cookery.—There is decidedly too much of it already in this country for the health of the people. It is a poor book to recommend to "plain farmers." Better publish the manner of cooking, and style of living in New England, when your worthy father was a youth there.

The Trees of America.—I really hope this is just what it should be, for upon no subject was a good standard work more needed. Your remark that "the engravings are executed with considerable skill," is such faint praise, that I am induced to think they are not what they should be. [They are very neatly and accurately done.] It is one of the great beauties of Michaux's work upon the same subject, that the engravings are superb. If by some means the public mind of America cannot be induced to preserve and cultivate forest trees, the day is not far distant when we shall be as destitute of timber as many parts of Europe, where the want of it is distressing. I suppose I must not say it should be the duty of the United States government to plant and use groves of timber upon the vast tracts of western prairie land, lest some politician should tell me that "that was not the legitimate business of government," but "should be left to individuals," and therefore never accomplished.

Review of the Market.—There are two or three facts in this of so much importance that I cannot close my review without calling the serious attention of American cultivators to their importance. Wheat in this market, the last of August, is worth 1 1/2 to 1 2/3 cents per pound; manufactured into flour, only about 2 cents per pound. Rye is one cent per pound, and corn a little less. Sugar averages about 6 cents per pound, while mustard is from 16 to 31 cents per pound. Now is it possible that any farmer can grow and pay freight upon, to send to market. 16 or 20 lbs. of wheat at the same price as one of mustard, or that he can manufacture and send to market 12 lbs. of wheat flour, for which he gets no more money than for one of mustard? Or can the planter send 4 lbs. of sugar to pay for 1 lb of mustard? A crop of mustard can be grown and sent to market as cheap as a crop of timothy seed, and yet that is quoted at an average of about 3 cents per pound. Again, 6 lbs. of hops will bring as much as 60 lbs. of wheat; and 1 lb. of hops can be exchanged for 2 1/2 or 3 lbs. of sugar. As hops will grow wherever corn will, is it worth while for Northern farmers to undertake to compete with corn sugar against the southern cane? If you cannot afford to exchange flour, you can mustard and hops. It is singular, too, if beans and peas, particularly the latter, cannot be grown as cheap as wheat; yet they are quoted 50 per cent. higher. Again, sumac is quoted at about four-fifths the price of tobacco, and yet it does not require so rich a soil, nor one-tenth the labor of tobacco. It is also worth more by the pound than wheat. There are certainly great inconsistencies in these prices, which must wholly arise from the neglect of those who are the most interested, as to what is the most profitable crop for them to cultivate. REVIEWER.

REVIEW OF THE NOVEMBER AND DECEMBER NOS. OF THE AGRICULTURIST.

[New York American Agriculturist, 6:155-57; May, 1847]

[December ?, 1846]

Noxious Effects of Gases of Brick-Kilns on Fruits and Vegetation.—Now, it appears to me, that this matter all lies in a nut-shell. "Everybody knows" that the gas arising from burning coal is injurious, but is it so from a wood-fire? Then if the kilns noticed by Dr. Underhill were burnt with coal, which I presume they were, the story is all told—for the gas is that arising from the sulphur burning in the coal and not from burnt clay.

British and Irish Flax-Culture.—Its history, etc., but nothing of American flax-culture. For that is among the unknown things. And yet Solomon in all his glory could not convince me that it would not afford more profit to the culturist, either for seed or lint, than I have shown that the culture of wheat affords. I am satisfied from personal observation, that a vast portion of the virginsoil of Ohio, Indiana, Illinois, Wisconsin, Iowa, and Missouri, is well adapted to the growth of flax; and yet how little of it is grown. The reason, it is said, is, that the price is too low. And yet in this No. of the Agriculturist, now under review, flax is quoted at seven and eight cents a pound, and flour at three cents.

It is wondrous strange if flour can be delivered in New York City for less than one-half the price per pound of flax.

Preservation of Potatoes.—I beg leave to call the attention of the American Agricultural Association to this article, and that they take immediate steps to test its truth, and publish the result, as it is of vast importance if true.<sup>1</sup>

"Burrall's Corn-Sheller."—Is this the last improve-

¹The article stated that if potatoes were immersed four or five days in ammoniated water containing one ounce of liquor ammonia to a pint of water they could be preserved throughout the year. *American Agriculturist*, 5:337.

ment? For really they come so thick that I am in the condition of the drunken man that thought his bed was going round him, and did not know when to jump on. At last when he thought he was "all right" he jumped and fell into the fire and burnt his fingers. And so it is of these machines. The inventive genius of Yankeedom is so great, that these machines come and go so fast that I don't know when to jump on, for fear I might burn my fingers.

Popular Errors, No. 2.—Shrinking and Swelling of Meat in the Pot.—And do you suppose that this error, that was so popular in your youth, is now a thing of auld lang syne? I assure you it is as popular now as it was before the commencement of this "age of improvement." And although you and I may deny the moon, there are others who will as religiously adhere to it as witch-ridden mortals do to their preventive horse-shoes.

Treatment of Mules by Doct. Phillips is like all of the Doctor's writings—just like himself—busy, bustling—full of life and vivacity. But I am glad to hear, Doctor, that you have less colic than at Brandon Springs. No doubt that your systematic management of mules is the true cause of your success; but more particularly is it owing to the fact of your giving your own personal attention to such "small matters," which saves you the expense and vexation of the enormous annual loss of this useful animal in your own "glorious south."

Gardening, No. 9.—The interest of these articles of Mr. Talbot is still kept up, and if any of the subscribers of the Agriculturist have not yet read them, I advise them to make use of these long winter evenings for that purpose.

The Enemies of Bees.—Mr. Miner in this article promises in his next to teach us the philosophy of keeping the moths out of our hives. Well, I long to see it. I have been much pleased with these articles, and, on account of their general good quality, refrained from pointing out some minor errors. I am entirely sceptical upon the sub-

S. B. Allen, Editor of I'm. Agrict In Nov 1. Communication for the month. ion 15 Attending to business when watered to Distribute how bills 40. half menta? Dec. 1 Article furnished for this month & 1846 for your puper -J. Jan. 1 Anticle for this mostor Feb. 1 11 plane 46 of noun 10 -Mar. 1 2 " A/26.1 " 3 sent by muil review of Ment No. 25 -7 43 Carle haid changes as beaches -Must were see that is it hages Sep. 18 " " try in. 11 lager Oct. 5 " .. Sep. No. 18 uges " 8 Bill of books returned musulo. 7703 1 25 Wings in 20 bis haber 45hipping Do ichners in first bill. " 2º bill. 337 11 Du. 15 Review or Oct. ADD. 4.4ca Ass. 16 pages.

## ROBINSON ACCOUNT BOOK, 1845-1846

[Detail from a page of the original, in the possession of Mrs. Dora Randolph, Crown Point]



ject of ever preventing the ravages of these dreaded enemies of the bee-breeder. While upon this subject, I have been told that there are no honey-bees in Oregon. Who knows? And who can tell the best method of getting them there?

A Ready Rule for Farmers, made readier.—A "quarter of wheat" is an English measure of eight standard bushels—so if you see wheat quoted at 56 shillings it is 7 shillings a bushel. A shilling is 22 1/2 cents; multiply by 7 and you have \$1.57 1/2 per bushel.

In Kentucky, corn is measured by the barrel, which is five bushels of shelled corn. At New Orleans, a barrel of corn is a flour-barrel full of ears. At Chicago, lime is sold by the barrel, and measured in the smallest sized cask of that name that will pass muster. A barrel of flour is seven quarters of a gross hundred (112 lbs.) which is the reason of its being of the odd measure of 196 lbs. A barrel of tar is 20 gallons, while a barrel of gunpowder is only a small keg holding 25 lbs., and that reminds me of cotton, a *bale* of which is 400 lbs., no matter in what sized bundles it may be sent to market.

Proposed Safety Lamp.—Allow me, my dear Doctor, to publicly thank you for calling the attention of cotton-planters, or rather those of our Yankee friends who do up all such little *chores* for you, to the great advantage of having a wire-gauze safety-lamp.

The only reason why they have not been manufactured in this country is, because there has been no demand for them. But let it once be known that every cotton-planter would buy them, as well as every factor, carrier, packer, or handler of this combustible article, and I will engage that the market will be supplied. It appears to me that they should also be used in every stable, and in the manufactories where the breaking of a glass lantern often endangers hundreds of thousands of dollars' worth of property.

Dr. Phillips speaks of a square shape, with a door strongly fastened, &c., but I suggest a barrel shape, and a heavy bottom screwed in with a coarse screw.

American Wine.—Will that happy day ever come when we shall cease the folly of importing the "drugged pernicious stuff which is too often, we may say almost generally, imported for the use of the sick," and make use of a pure home-made wine? I feel proud to call Mr. Longworth an old friend of mine, just for what he has done to encourage and foster the growth of grapes in our country.

It is delightful to take a ramble around among the hills at Cincinnati, to see how the energy of this one man has caused the wild and rugged hill sides to bring forth an abundance of this rich fruit. So long as wine must and will be made use of, I would prefer to see that raised from our own soil only used. As an article of medicine it is undoubtedly highly beneficial.

The Potatoe Disease.—Enough said. "All signs fail in a dry time." Chronicle facts, but no more crude and useless speculations and recipes.

Entomology, No. 1.—Lest some of your little readers won't look in the dictionary to learn the meaning of that kind of *ology*, allow me to tell them that it is the history of insects, and I have no doubt but Mr. Talbot will make a most interesting series of chapters well worthy the perusal of old and young. The United States seem to be the home of bugs and all manner of creeping things, that are an exceeding great pest to American farmers; and they are rather on the increase, and give evidence every season of the correctness of the theory of the author of Vestiges of Creation, that new kinds are constantly occurring. I beg friend Talbot to condense as much as possible—not in the length of his articles, but in individual descriptions, for I am anxious for him to give a slight description of a very numerous family, without tiring his readers. He can do it.

The Old Lady's Diary.—I have heretofore given my commendation to these excellent and quaintly written articles. "May they live a thousand years." The two recipes in this article are worth more than a year's sub-

scription to this paper, to say nothing of the directions how to get rid of the fleas—to which add some of my diet for dogs, and it will help the matter, for then there will be less fleas. To the old lady's recipe for making "cream cheese," let me add my old Pennsylvania wife's recipe for making soft cheese—in Dutch, Smear Case.—Take a pan of lobbered milk and heat it gently, about blood warm, and the whey and curd will separate; pour it in a strainer and hang it up until well drained; then break up the lump and rub it between the hands quite fine and add half a pint of cream to a soup-plate full, and it is cream cheese in our every day form. Try it; I guess you will like it; it is cheap.

Allen's American Agriculture.—If this is not a better American book than "Johnson's American Farmer's Encyclopedia," I never shall thank my friend Richard for my copy which I have not yet read. But I think I know the author from his boyhood up, and can vouch for the work in advance, as being one that will interest every reader who undertakes its perusal, and if it don't make him a wise, good, and intelligent American agriculturist, he will not be what this author is.

Premiums Awarded.—Those of the State Society it will be seen are mostly in dollars, or books. I doubt the good policy of all premiums, at these shows, as well as the manner in which they are awarded. And I hold it to be entirely bad policy to give them in dollars. Cups and medals, such as those the American Institute give, are in much better taste. They will be preserved long after the dollars are melted away and gone. If all these sums expended in premiums could be funded, how long would it take to accumulate a sufficient sum to endow an

¹ Cuthbert William Johnson, agricultural writer, born at Bromley, Kent, September 21, 1799; died at Waldronhurst, Croydon, March 8, 1878. Wrote numerous books and pamphlets on agricultural subjects and in 1844 translated Thaer's Principles of Agriculture from the German. An American edition of his Farmers' Encyclopaedia was published in Philadelphia in 1844. Dictionary of National Biography, 10:896 (1908 ed.).

agricultural school that would be an honor in all coming time to our Empire State. I only throw out the hint here by way of text. Who will take up the subject and finish the sermon? It is worthy of consideration.

I now come to the December No. The first article I shall notice, is that upon

Preparing Corn (Maize) for Shipping to Europe.—It strikes me that I am Yankee and old sailor enough to invent a portable steam-engine, that can be taken into the warehouse or on deck of the receiving ship, which shall thoroughly dry the corn in the act of passing it on board and into the hold. By passing the corn through a tube of only a few feet in length, made so that a volume of hot steam surrounds the corn and keeps the tube as hot as steam can make it, would effectually free the corn of moisture, so that it would go into the hold so dry as almost to insure it against mustiness. Who will try it? I charge nothing for the patent.

Letters from the South.—"Richard is himself again" whenever he takes hold of the pen. But at present he is travelling by railroad entirely too fast to give that interest to his letters that a slower rate of locomotion would enable him to do. So general a description as becomes necessary to crowd all the country between Baltimore and Charleston into one letter, lacks that detail which gives zest to a traveller's notes. We want you to stop by the wayside and "talk over the matter" with the old man and woman, girls and boys, besides the negroes. Give us "ten thousand a year" of little details of Southern farming, together with descriptions of lands, farms, ferries, stock, tools, and all the fixings. You must do it. The editor has long promised us something of the kind. [We have some of his letters in hand, which will soon appear, particular enough to suit Reviewer.

Present Corn-Crop.—"Five hundred millions" is "all in my eye," and plenty of room for more. Your own estimate is nearer the truth, but that of 5 3/5 bushels to each soul in the United States, based upon the census of New

York State the past summer, is far nearer the truth. I don't believe the average of the Union is greater than that of the State of New York.

Pigstyes.—Very good—much like mine—nothing new. My plan better. Excuse an old sea-captain who is in the habit of speaking positive. My floor falls each way from the centre, two inches in ten feet, so that the wet cannot run into the beds. My troughs run the whole length of the front, and have horizontal doors so hung, that when swung back, the latch falls on the inside edge of the trough, which leaves it for cleaning or filling on the out side of the pen. When the food is in, raise the latch and the hogs push the door forward until the latch falls on the outside of the trough, and holds it there until you want to feed again. The advantage besides the convenience, is, that all the hogs come at once to the feed and share it more equally. And you know, in spite of all education, hogs will be hoggish, as well as folks, about their eating.

Show of the Berkshire Agricultural Society.—This comes from a ready pen,¹ the traces of which I should like to see oftener in your pages. It also reminds me of home, though I would not from this have your readers think that I am Berkshire born. This, I believe, is the oldest Society of the kind in the United States, and like some of my friends, it grows better with every year. May the Spanish salutation apply most particularly to it; and may all its doings tend to

"Variegate, adorn, And make the farmer's home delightful."

The Alpaca, No. 7.—This No. is the most interesting of the series, though there is that in it which looks rather discouraging to those about engaging in the importation of Alpacas into the United States. I am more and more convinced, that if the attempt is made to bring them around Cape Horn, a large portion of them may be ex-

<sup>&</sup>lt;sup>1</sup> W. Bacon, of Mount Osceola, Massachusetts.

pected to die on the passage. But after their arrival, if due attention is paid to what is written in these few short articles, it does seem to me, that they can be naturalized to some of our mountainous districts and prove an immense addition to our national wealth. Every person desirous of information about the Alpaca, should procure this volume of the Agriculturist. I do not know where he could obtain the same amount of information in so cheap and condensed a form.

The Strawberry Question.—By W. R. Prince.¹ As of the potato question, enough said. Mr. Prince spins out his yarn entirely too fine to wear well with a majority of your readers. And those who read his articles must "wade along" as deep as he has done in Mr. Downing's articles." Mr. Prince cannot "set this question at rest for ever." His bump of combativeness is too large; and so is that of "the opposition."

"Review" of the last Review.—I asked you, Mr. Editor, uncommonly serious, to tell us "where to feel the pulse of animals," and you answer just as though you knew I owned flocks and herds of cattle which I often skinned, when in fact (not being a Loco editor) I never even skinned a 'coon. In another place you intimate that I may be "one of the Editors of the Tribune." In other words, a 'coon to be skinned. Now the fact is, you don't know whether I am a 'coon or a 'possum, as you have only seen my nose yet. Just wait till my tale is full grown, before you pretend to say whether I am one thing or another. As to our difference of opinion about the tariff, we won't say another word. Time will show.

The Corn-Crop.—Not what it is, but what it may be.

<sup>&</sup>lt;sup>1</sup>William Robert Prince, nurseryman and horticultural writer, born at Flushing, Long Island, November 6, 1795; died March 28, 1869. Published *Prince's Manual of Roses* in 1846, an admirable enlargement, with additional directions and comments, of *The Rose Amateur's Guide* (1837) of Thomas Rivers, an English nurseryman. Collaborated with his father in writing *A Treatise of the Vine* (1830) and also *The Pomological Manual* (1831). Contributed largely to agricultural periodicals. *Dictionary of American Biography*, 15:234-35.

You say, "that all men will acknowledge it to be a very profitable crop to the Western farmer." I am as well satisfied as you are, that it is more profitable to the Eastern one. I have conversed with a great number of corn growers of the West, who agree that the crop does not there average over forty bushels to the acre. And the price will not average over a shilling a bushel (12 1/2 cents) upon the farm, and in many places so remote from market that the corn must first be converted into pork, which is driven alive to market. And the stalks are absolutely worse than worthless, for it costs considerable labor to remove, or, as is most usual, cut and burn them out of the way for the next crop. But the Western land is less valuable, and the cultivation is far less than it is in this State and New England. But then the Eastern crop will average at least four times more in value than a Western one, so that if the number of bushels can be made to average the same, notwithstanding the manuring, rent, and expensive cultivation, the Eastern corn-crop is a more profitable one than the Western. You estimate the value of the crop of stalks, if cut green and well-cured, entirely too low.

Take the United States through, and I fully believe that the corn-crop for any ten years of the past century, will average the most profitable of any cultivated and that the same will be the case for the next century. "The fact is, it is a mighty fine crop, stranger, any how you can fix it."

"Ladies' Department."—My most respectful compliments to my dear friend "E.M.C.," of Lynn. How I wish I knew whether she was disposable or not, that I might tell her whether I was ditto, and seek her aid to help me out of my "unfortunate situation." As for "the class of ladies forming my acquaintance," they extend from New Orleans to Macinaw, and from Maine to Missouri, among which are many of the prettiest and best on earth; and I love the whole of them most truly, "E.M.C." included. And in all the cutting remarks I ever made in ridiculing

the disposition of "farmers' daughters," to learn "pianothumping," and little else, there never was one drop of gall. The truth is, I am notoriously good-natured; and I would not hold the anonymous and "thankless office of a critic," only in the hopes of being able thus to do more good than I could, unmasked. And my motto is "peace and good will," and though I intend to write with a free pen, I hope I never shall make a criticism in such a spirit as will drive one correspondent, particularly a female. from this paper. You will observe that I never criticise style—my own is too loose and negligent for that. I hope that every female correspondent will lay aside all fear of "Mr. Reviewer" (he won't bite nor scratch), and though I must continue to wear the "iron mask," take my word for it, that I have no iron features in my face to frighten them, and beg them to continue to let me see their beauties through the productions of their pens.

Influence of the Moon on Vegetation in Columbia.—Now I can get a thousand men to certify that the moon has an equal influence on vegetation in the United States, that this article asserts it does in that part of South America; but you would not believe it; neither do I believe that. Neither do I believe that salt will cure or prevent the potatoe disease.

Gun-Cotton.—If "villanous saltpetre" is to be dispensed with for this new combustible, how our Southern friends will be blowed up. And probably at some future time after the burning of one-half of New York city, it will not be necessary to inquire whether "saltpetre will explode," since we know that cotton will. I hope the whole of this new discovery will not all "blow out."

Agricultural Statistics of New York.—I want somebody that loves figures and has the leisure, to construct you a table to publish, showing the number of bushels per acre of each kind of grain, and the number of bushels of each kind per caput if it could be divided equally among all the souls in New York State. [We will endeavor to do this some leisure day.]

WARMING HOUSES WITH "HOT AIR" AND STOVES, [Chicago Prairie Farmer, 7:85; Mar., 1847]

[February ?, 1847]

I conceive to be "one of the inventions of the devil for destroying human life." "What! stoves? the old curmudgeon! not allow us any stoves! we should freeze to death!" I hear a thousand tongues exclaim. All of which I don't believe a word of; for when I was once a little boy there were none of these abominable inventions in that part of Yankeedom where I was warmed into existence by one of those good old-fashioned christian fireplaces, with the "old settle" in one corner and oven in the other. And who ever heard of folks freezing to death in those days.

"But the stoves save so much fuel." Granted; but it is at the expense of human life! Rooms are made almost air tight, and then the atmosphere, or what little remains shut up, is roasted with a red hot stove, then breathed, then roasted again, and so on, without the least chance of renewal, until the occupants of such rooms become so enfeebled that they are in danger of freezing to death whenever they encounter such a blast as our ancestors would have considered only a healthy breeze. As for cooking stoves, in a large well ventilated kitchen, I don't object to so much; although the steam and smoke from them, under the most favorable circumstances, is any thing but comfortable or healthy.

In a room warmed by a fire place, there is a constant current of pure fresh air kept up, by the draft of the chimney. Besides, who can forget those healthy, happy hearths of *auld lang syne*, where we spent the long cheerful winter evenings of our youth, building "castles in the coals" of a great wood fire.

But I have done. I am aware that I am in a heathen land, where stoves are worshipped, and to avoid "burning my own fingers" I must bow my knees to the national idol. I remain your frozen friend, SOLON ROBINSON.<sup>1</sup>

<sup>1</sup> The editor entered a firm defense of "air tights," but admitted that ventilation should receive more study in house construction.

## A LECTURE UPON THE EARLY HISTORY OF LAKE Co., IND by Solon Robinson

[From transcript of Ms. in possession of Amos Allman, Crown Point<sup>1</sup>]

[April?, 1847]

The early history of most communities, great or small, is wrapt in obscurity. Within a few years past, great efforts have been made to rescue the early history of some of the towns of Massachusetts, and other places from the darkness in which they were enveloped—Circumstances that in their day excited no curiosity, after the lapse of a couple of centurys are sought after and read with avidity. What has been, may be again. The trifling every day occurances in the first settlement of this county, an hundred years hence may be sought after with the same interest: but where shall their history be found recorded? Shall I attempt this task? I have done so, and I now lay them before you in the form of an address, not so much for your edification, as to ask you to correct my errors, and continue the record. I assure you that the time will come when such matter will be interesting. I shall proceed in that familiar style that I should do in writing a letter to a distant friend, or as if all my facts were as strange and new to you as they will be to those that fill our places an hundred years hence.

I have lately read the travels of Stephens, in the southern part of North America, among the vast fields of ruins of temples and palaces, of a people that have left no written language to tell of the wonders which the traveler sees around him. Here, we have no monuments of stone, but yet we can leave a more enduring remembrance behind us, upon these few sheets of paper.

Fancy then that this is the year 1947 instead of 1847, and let us call upon the days and years of "Auld Lang Syne", and display before us the early history of Lake

¹ Printed in History of Lake County, 35-64 (Publication of the Lake County Historical Association, volume 10, Gary, 1929), from the Lake County Star, Crown Point, September 8, 15, and 22, 1916.

County, Indiana. By the treaty of the U.S. with the Pottowottomie Indians, in 1828, a strip of land ten miles wide on the north line of the state was acquired: which extended in a very narrow strip to the extreme south bend of Lake Michigan which is on Section 35 in Town 37 of Range 8. This was the first purchase from the Indians in what is now Lake County.¹ Not yet nineteen years.

By the treaty of 1832, the remainder of the land was acquired, together with all that that tribe owned in the state except some smal reservations. Previous to this time no whites but the hunters and trappers of the American Fur Co., and the soldiers of the garrison at Old Fort Dearborn had ever trod the fertile soil of these broad prairies. This was the year of the celebrated Black-hawk war. At that time there was a garrison and a few Indian traders living at a place on Lake Michigan, about 12 miles from the N.W. corner of Lake Co., called Fort Dearborn. and this almost unknown and far remote frontier post 15 years since is now the City of Chicago. There were also a few settlers in what is now La Porte Co. in 1832. Some time in the year 1833, I believe the first settlement of a white family was made within the territory of what is now Lake Co.,2 near the mouth of the Old Calamic, by a man by the name of Bennett, for a tavern; for the accomodation of the necessary travel along the beach of the Lake, then the only road. Though I believe that the Old Sac trail began to be traveled the same year, from La Porte to the Hickory Creek settlement—but an incident that I shall soon relate will show you that it was but a blind path of the wilderness.

The next family was by the name of Berry, also tavern

<sup>&</sup>lt;sup>1</sup> See Robinson, 1:11.

<sup>&</sup>lt;sup>2</sup> Obadiah Taylor, ancestor of the large group of Taylor families, with several of his sons and his son-in-law, Dr. Calvin Lilley, came to Lake County in 1832 from South Bend, Indiana, and Erie County, Pennsylvania, but they did not remain. They returned, however, in the spring of 1836, settling at Cedar Lake. Letter of Arthur G. Taylor to Herbert A. Kellar, July 12, 1929.

keepers on the beach of the Lake, in the spring of 1834. There was also another of these beach tavern built this year I believe, but whether within our present county limits, I cannot say.

They were all temporary settlers, located for the purpose of administering to the necessities and not much to the comfort of emigrants that began to flock into Illinois by this only known route along the Lake Shore. I have myself slept with more than 50 others in and around one of these little log cabin taverns, and paid \$3— a bushel for oats to feed my horses, and as for my own food I had it along with me, or should have had none, as the tavern had not a mouthful of meat, butter, milk, sugar or anything eatable but flour & coffee. And this was a stage house. For in those days, a flourishing line of four horse post coaches were in operation upon this route. Something of the kind had been in operation the season previous along the Old Sac trail, from Detroit to Fort Dearborn. About four miles West of the State line I saw, soon after I came here, where the contractors had built a stable for their horses, but whether the passengers lodged in the same. I cannot say. So much for early staging in this county. And at that time if one had predicted that within a dozen years there would be a daily line of steamboats from Buffalo to Chicago, he would have been called as visionary as I have been by some, of my present audience, who in those days used to laugh at my predictions of what a dozen years would bring to pass in Lake County, and yet time has proved that the half was not told them.

In the summer of 1834, most of the land in the county was surveyed by the United States Surveyors, and settlers began to "make claims", and four or five families settled that fall.

One of these I found in October, 1834, in a little shed roof cabin on Sec. 6, T. 35, R. 7, at a place afterwards known as "Millers Mill." His name is already among those that once were, but now are forgotten.

I am inclined to think that an old man by the name of Ross also settled on the same section that fall. This man was killed by the falling of a tree near Deep river in 1836. I believe King Al-cohol was there to see, and it happened on a Sunday. An old man by the name of Winchet, from La Porte Co. made a claim, built a cabin, and commenced work on a mill, near the mouth of Turkey Creek, and had part of his family there some time in the summer of 1834, but afterwards abandoned his claim without settling upon it permanently.

In October of that year, Thomas Childres and myself made claims and moved on to them; his on the S.E. 1/4 of Sec. 17, T. 34, R. 8, near where C. Volney Holton now lives, and mine on the N.W. 1/4 of Sec. 8, same town., a spot that will continue to be known while the county seat remains in its present location.

My first house is still standing, it is that little old black log cabin, upon the lot occupied by Mr. Pelton. I arrived upon this spot with my family the last day of October, 1834; Childres a day or two before.

On the next day, Henry Wells and Luman A. Fowler, came along on foot in search of locations. They left their horses back on 20 mile prairie. Cedar Lake was then the center of attraction for land lookers, and thither these like others, wended their way, without thinking to inquire who kept tavern there. They found a lodging in a leafy tree top, and the leg of a roasted 'coon for sup-They also found David Horner (father of Amos & Henry), his son Thomas & a man by the name of Brown looking for claims, upon which they settled next year, lived there a few years and flitted again. Wells and Fowler came back to our camp next day so tired & hungry and sick of the country that they would have sold the whole, Easau like, for a mess of pottage. But after a supper sweetened with honey & hunger, and a nights rest upon the softest kind of a white oak puncheon the next morning being a bright sunny one, this land looked more inviting, and they bought the claim and two log cabin bodies built by one Huntley upon the South half of Sec. 8, T. 34, R. 8, for which they paid him \$50 in cash. Of course cash must have been more plenty with them then than it is now.

Wells went back to his family near Detroit, and Fowler spent the eventful winter of 1834-5 with us in the solitude of the first settlement of what soon became known as Robinson's Prairie. Fowler returned to Detroit in the spring, got married in the fall & returned with his wife & Wells' wife & child, and settled upon their claims. Wells arrived shortly after, and both families have since multiplied after the fashion of all new settlers.

During the first winter we had many claim makers, but few settlers. The majority of those making claims, were doing it for the purpose of speculating out of those who might come afterwards with the intention of becoming actual settlers.

The first family that came after Childres and myself, was that of Robert Wilkinson, at the place where his brother Benajah now lives on Deep River, at that time, the only known crossing place. He settled about the last of November, 1834. The next family was that of Lyman Wells; afterwards well known as "Lying Wells". With him came "Irish Johnny" now known as John Driscoll. They came in January, 1835, and settled on Sec. 25, T. 33, R. 9, near where Driscoll now lives. Driscoll was then single, but has since obeyed the scriptural command to multiply and replenish the earth.

Wells had a wife and 4 or 5 children—He lived a few years here and moved further West, and his wife died & some say the world would not have suffered much loss if he had died too. Wilkinson lived a few years where he settled when he moved off and his brother took his place.

Next after Wells came, William Clark & family & William Holton and mother, and sister, about the middle of February, and in a few days after came Warner Holton & wife & child. These families are still with us. Clark first settled on the N.E. 1/4 of Sec. 8, and Warner Holton

right North on the next quarter, and William still lives in the same old cabin which he built on his first visit to the country in December, 1834.

The arrival of these families gave us considerable pleasure, for they had been our old and intimate acquaintances and neighbors in the south part of the State.

The first part of the winter had been mild and pleasantly cold, but in February came on the most severe weather that I have ever seen since I have lived upon this prairie, and as we had reason to believe they were on the road, we naturally felt considerable anxiety for them, as they were to come by the way of the upper rapids of the Kankakee, at that time a much more desolate and unsettled region than it is now.

Some of the perils that they endured may be aptly attended to, as connected with the history of the settlement of this county. The marshes south of the Kankakee were covered with ice, upon which night overtook them endeavoring to force their ox teams across. There was no house, and they were unprepared for camping out, and one of the most severe cold nights about closing in upon them, surrounded by a wide field of ice, upon which the already frightened & tired oxen refused to go farther; and not a tree or stick of fire wood near them.

I allude to this to show those that think they meet with great hardships *now*, that the pioneers met with more severe ones. These families upon this night might have perished, had they not providentially discovered a set of logs that some one had hauld out upon a little knoll near by to build a cabin with, and with which they were enabled to build a fire to warm a tent made out of the covering of their wagons, and which enabled them to shelter themselves from the blast that swept over the wide prairie almost as unimpeded as over the mountain waves of the ocean. The next day, by diverging ten miles out of their course, they reached a little miserable hut of an old Frenchman, who lived with his half Indian family on the Kankakee. Here they staid two days and nights; such

was the severity of the weather that they dared not leave their uncomfortable quarters; and when they did so, they had to make a road for the oxen across the river by spreading hay upon the ice and freezing it down by pouring on water.

They then had near 40 miles to drive to reach my house, but fortunately for them one family had settled about half way upon the road, or rather Indian trail, a few weeks previous where they spent one night and from there with one accident in crossing West creek, that came near causing them to lay out another night, they reached us some time after dark. To enable them as well as others to find our lone cabin, where there were no roads, I had put up several guide board upon the different trails, giving the course and distance thus:

"To Solon Robinson's, 5 miles North." One of these solitary guides upon a very faint path of the wilderness, had been found by our emigrants just before dark, and I appealed to them to say if they ever hailed a guide board with greater pleasure.

While our friends are made comfortable around the cabin hearth, (some of you that are now complaining of want of room, think of that—3 large families made comfortable in that little log cabin)—let us inquire how fare the cattle, when there is not a lock of hay or straw within So far I had wintered a horse, or rather an Indian poney, and yoke of oxen upon hazel-brush & a scanty supply of corn; for that as well as every other supply for man or beast, hasel brush excepted, had to be obtained from La Porte, by hauling it through marshes & bridgeless streams, and through almost a trackless wilderness-Indeed Mr. Fowler and Lyman Wells, during this eventful winter, while engaged in this very business of obtaining provisions, exposed themselves to the most iminent peril and danger of loss of life. A graphic account of one of the scenes in which Mr. Fowler was engaged, has been read by many thousands under the title of "The first trip to Mill". It is printed in the Albany Cultivator in June 1841—Allow me to read it, as part & parcel of our history—<sup>1</sup>

At a subsequent period, Mr. Wells in coming from Wilkinson's crossing of Deep river after dark, missed his course for there was no path, and got on to Deep river somewhere about south of the Hodgman place & broke through the ice and with great difficulty succeeded in getting his horses loose, and in undertaking to get back to a house on 20 mile prairie, riding one horse and leading the other, he came unexpectedly to a steep bank of the river in the dark, and pitched headlong down a dozen feet into the water and floating ice. He clung to one horse & succeeded in reaching the other shore, and getting near enough to the house to make himself heard by the loud cries he gave as the only means of saving his life.

About noon next day he found his other horse on a little island near where they made the fearful plunge, but it was near night when he found his wagon.

At a time previous to this, his family got out of provisions & made a supper of a big owl, and were on the point of roasting a wolf, when a supply arrived.

During this winter, the Legislature named the teritory lying West of La Porte County, and North of Town. 33, Porter County; & South of that, Newton County. We were previously attached to St. Joseph for representative, and to La Porte for judicial purposes.

At the session of 1835-6 the teritory North of the Kankakee was divided into Porter & Lake & the former was organised, and the latter attached to it—Lake County being 16 miles wide and about 32 long, and contains about 500 square miles, and is the North Western-most county in the State of Indiana. Of its organization, I shall speak by & by—I will return now to the progress of the settlement.

In the fall of 1834 after I settled here, old Mr. Myrick & his sons Elias & Henry & Thomas Reed made claims which they moved on to the next season. In the spring

<sup>&</sup>lt;sup>1</sup> See Robinson, 1:160 ff.

of '35 the "Bryant Settlement" was made, and a Mr. Agnew, who married a sister of Elias Bryant, perished with cold in the month of April, on the prairie East of pleasant Grove, having been night overtaken in coming from Morgan prairie with a load of stuff preparatory to moving his family on to his new claim. Not detered by this sad misfortune, his widow afterwards moved into her new home, the making of which had proved so disastrious to her husband. On the 4th of April of this year there was a most terrible snow storm; the weather previous having been mild as summer.

But in the spring of '35 families began to come in so fast that I can only particularise a few of them. Judge Wilkinson, is one of them—he settled where he lives now; having moved from the Wabash, and from whence, like a great many of the early settlers, all his grain and provisions had to be hauled more than 100 miles, over such roads as none but those who toiled through them in those early times can have any idea of. Messrs. Stringham, Foley, Fansher, also moved from the Wabash region this spring. There were quite a number of other families who also settled this spring, but few of whom remain with us now. Mr. Pelton is one of the "old Settlers, for he came here in June of this year & found me building fence around the first corn field ever enclosed on "Robinson's prairie"; unless we except the little patches planted by the Indians; one of which partly enclosed by a very rude pole fence. I found on the spot now occupied by my house & garden.

In the fall of '35 we had grown into so much importance that the tax collector from La Porte come to pay us a visit which was about as welcome as such visits generaly are.

Considerable quantities of corn, oats, buckwheat & turnips & potatoes were raised this summer & plenty of hay put up for the use of those then here, but the new comers came so thick in the fall and winter, that there was a great scarcity before spring, and numbers of cattle

starved to death. There had been during this summer so great a scarcity of horse feed in all this Northern region, that oats sold readily by the load, at 8 or 10 shillings a bushel; at which price I sold out a stock that I had provided for feed and seed, but which I had not been able to sow, because I was like all new settlers, who invariably lay out twice as much work as they can do. The first school in the county was kept by the widow Holton this winter at her house—she had 3 scholars.

In the winter of '35 & 6 wheat on La Porte Prairie was worth \$1.50 a bushel & not half enough raised to supply the great demand occasioned by the influx of emigrants, so that most of the Lake County settlers had to draw their provisions from the Wabash during the summer of 1836. Up to March of this year our nearest post office was Michigan City, but having applied for it through our two Senators at Washington, with both of whom I happened to be well acquainted, I was appointed post master & the office was named "Lake Court House." During the first year I had to supply the office with the mail at my own expense from Michigan City for the proceeds of the office. I need not tell you that it was not a money making contract. The receipts up to Oct. 1 were \$15—the next quarter \$8.87, but the 3d quarter shows a rapid gain for it amounts to \$21.49. After this, the seat of justice for Lake County having been temporarily established here, a contract was ordered to supply this office weekly from La Porte & was taken by John H. Bradley at I think \$450 a year. The re'c'ts of the guarter ending June 30th, 1837 were \$26.92. The next which ended Sep. 30th-\$43.50. The next \$38.20. The first gr. of 1838 was \$51.33. The next \$51.39 and that appears to be the largest sum ever received in one quarter while I held the office.

But let us return and take up the events as they transpire:

In the spring of 1836 we were attached to Porter County, the commissioners of which divided this county into three townships & ordered an election for a Justice of the Peace in each. This was the first election in Lake County. Amsi L. Ball, Robert Wilkinson & Solon Robinson were elected & held their offices until the county was organised next year & neither got fat upon their fees. I reccollect having one suit before me & think that Squire Ball had two perhaps three, but I don't think that Wilkinson ever had any. So much for law in those days.

The first preaching of the gospel in the county, if I reccollect aright, was by a Methodist minister by the name of Jones; and one of his first, if not the very first, sermons was at the house of Thomas Reed; and from the size of the house, his congregation could not have been large. He was sent here by the presiding elder of the Northern Indiana Conference, who resided at South Bend. The next year the county was included in the Porter County Mission under the charge of Mr. Beers.

The settlement progressed rapidly this year & some good crops were raised. Of the great events of the year I will mention two. The formation of the "Settlers Union" for the mutual protection of each other's claims, for all were then squatters upon public land.

The other was the great sale of lots in the town of Liverpool, to the amount of some \$18,000, which is eighteen thousand times as much as the whole town is worth now. At this sale the first electioneering speech in this county was made by Gustavus A. Everts, then a candidate for Senator for this county & Porter, La Porte & St. Joseph & I think Elkhart.

In the fall of this year we added a physician to our population in the person of Doctor Palmer. Previous to this there was none nearer than Michigan City.<sup>1</sup> For in the spring of this year I had employed one from there.

The first store in the county was also established this year. And during the winter of 1836 & 7 we, that is my brother Milo & myself, sold about \$3000 worth of goods out of that little old log cabin adjoining the one now used as a court house.

<sup>&</sup>lt;sup>1</sup> Dr. Calvin Lilley, belonging to the Taylor settlement, was the first physician, settling at Cedar Lake in the spring of 1836.

The best of our customers were the Pottawattimies who then dwelt here in considerable numbers. With them commenced my first efforts of a temperance reformation. Of them we obtained great quantities of furs & cranberries, in pay for goods, while those calling themselves far superior to the poor Indians in all the moral attributes, gave us promises to pay, some of which are promises to this day.—The first marriage in the county was that of David Bryant, another of my official acts as a Justice of the Peace—Done on a most excessive cold day. The 2d was Solomon Russel, and his was afterwards the first divorce.

During the same winter, the first mill in the county was put in operation by Wilson L. Harrison, so that we were able to get a little oak lumber in the spring of '37 for \$15 a thousand.

In March, 1837, the election of officers upon the organization of the county took place. At this time so slow was the operation of the mails, that a special messenger was dispatched to Indianapolis to get the appointment of a Sheriff & authority to hold the election, the first appointment having failed. The messenger was John Russell, who made the trip on foot & beat the mail at that. Henry Wells was appointed Sheriff. The election for the North township was held at Amsi L. Ball's—for this Center Township at the old log cabin which was Mr. Fowler's first house, now standing near Mr. Eddy's—and for the South at the house of Sam'l D. Bryant.

Wm. Clark and Wm. B. Crooks were elected associate judges—Amsi L. Ball, Stephen P. Stringham and Thomas Wiles, County Commissioners. Wm. A. W. Holton, recorder & Solon Robinson, Clerk. Several of the first meetings of the Board were held in that old log cabin in Mr. Pelton's yard.

John Russell was the first assessor; and such was the fever of speculation at that time, that some of the lands around Liverpool (and another paper town called Indiana City, laid out at the mouth of the old Calamic) which

lands were held by locations of Indian reservations & floating pre-emption rights, were assessed some of them as high Twenty Dollars an acre. The same lands will not now sell for as many cents an acre. . . . .

At the first election for justice under the organisation, one Peyton Russel was elected in North Township; Milo Robinson & Horace Taylor in Centre & E. W. Bryant in South Township. The first lived at Liverpool & like the town has gone to parts unknown—the second died January 1st, 1839, the 3d has moved from the county, and the latter is alive & shaking; or at least was so a short time since with the ague.

At the August election, Luman A. Fowler was elected Sheriff and Robert Wilkinson, Probate Judge.

During this summer there were a good many new settlers come in—and several frame buildings were put up; one of the first of which is the frame part of the house where Mr. Pelton now lives; which was built by my brother & myself who were then in partnership, to accommodate the public and was for several years the only tavern house here.

We also built the log building which has ever since been occupied as a court house & place of worship &c.

It will be as well here to recur to some facts connected with this assessment, as profitable for reflection. The number of acres on the first assessment roll was 8726, valued in total at \$77,787; a fraction less, on an average, than \$9 an acre; the tax upon which amounted to \$894. There was but little if any improvements on these lands at that time. There were 409 town lots in Liverpool, assessed at \$26,440 too much by just three of the left hand figures—some say four—There were 226 polls, and 23 over age, making 249 persons assessed for taxation. The poll tax amounted to \$282.50. The value of personal property \$45,368. But the same spirit of high values

<sup>&</sup>lt;sup>1</sup> Horace Taylor was in Wisconsin for several years, but later returned to Lake County, went to California in 1849, and was killed in an Indian massacre on the return trip. Letter of Arthur G. Taylor to Herbert A. Kellar, July 12, 1929.

governed in this as in case of the valuation of lands-For instance, Cows were \$15 or \$20 a piece. The personal property tax amounted to \$521.—The total \$2002. It is needless to say that much of this was never collected. The owners of land would not pay & quite a number of the floating population, floated out of reach of the collector, before pay day.—Luman A. Fowler was the first collector. The floating and unsettled nature of the settlers of a new country is aptly illustrated by the first settlers of this county—for of the 249 persons who were assessed here only ten years ago, eighty only remain and twenty-seven have died here—so that 142 have rolled on in that irresistable wave of Western emigration, that never will cease till it meets the resisting wave of the Western ocean which will cause the mighty tide to react upon itself until all the mountain sides and fertile plains of Mexico & Oregon are teeming with the Anglo Saxon race.

The usual mode of estimating the number of inhabitants, is to multiply those assessed, which are mostly heads of families, by five-This would make the population in the spring of 1837 about 1245. In 1840 the U.S. census was taken by Lewis Warriner-it was then 1468-Now let us examine the assessment of 1846—There were 600 persons assessed, and I am aware of several who were not included—This would give us a population of upwards of 3000 in the spring of 1846-Of the men assessed last spring, seventeen have since died—this at the rate of about 2 1/2 per cent per annum and would give 75 or 80 as the total number of deaths in the county the last year. I have no means of ascertaining the truth. I will give the names of those whom I know have died-They are: Isaiah L. Beebe, David Currin, Doct. Joseph F. Greene, Thomas Henderson, Myiel Pierce, John R. Simmons, Thomas Gibson, Jeremiah Green, John Hack, Jr., Cornelius F. Cooke, Judge Samuel Turner, Mr. Hollingshead, Mr. S. C. Beebe, David E. Bryant & Mr. Miller, Royal Barton, John Smith, Mr. Lathrop, Ambrose Williams, a

young man, and Mr. Livinggood, whose names are not on the list have died, and an old man by the name of Simons perished near the mouth of Deep River—He was said to be a very steady temperate man, but being much exposed to cold and wet on a raft, yielded to the temptation of drinking whiskey, which deranged his intellect & destroyed a very useful life.

At the election in March, 1837, there were 78 votes polled. At the last August election 327—but owing to sickness, this was far below the whole number, for at the Presidential election in 1844 there were then 325 votes.

The assessment of 1846 has 54,421 acres of land, which of course is only what has been entered 5 years—this is valued at \$78,742, an average of a fraction less than \$1.45 an acre, the improvements on the same are valued at \$43,445, total land value \$122,287, a fraction less than \$2.23 an acre including improvements—Amt. of personal property assessed at extremely low prices, \$95,849—making a total of \$223,713 upon which a tax of \$2754 was levied, including polls & for State, County & road purposes. Now let us resume our chain of events.

You that think building so expensive now, may do well to learn some of the prices then.

Oak lumber I have told you was \$15 a thousand—The pine lumber in these buildings & the original part of the house where I now live, which was built the same season, cost us \$35 a thousand. Nails 15 cts. a pound—Glass \$4 1/2 a box—Shingles \$3 a thousand. Provisions at the same time were \$10 a barrel for flour; \$25 a barrel for pork and 12 1/2 to 20c a pound for bacon—27c a pound for butter—7 & 8 cents a pound for fresh pork, fatted upon white oak acorns, and about as dry & hard as what it was fed upon—\$25 to \$40 a piece for cows. These were prices we actually paid that year.

During this season we had preaching several times at our house & in the present court room after that was finished; and by the manner that every body far and near turned out to attend meeting, and by their apparent en-

joyment of such privileges, a stranger who had seen the community then, and again now, would unhessitatingly say that there were more professing christians at that time, than at this, in proportion to the population. Indeed there were settled around here in that year (1837) a goodly number of very zealous & exemplary christian professors; but as they belonged to different denominations, there were not enough of either to attempt the formation of a church at this place, though I think that the Methodist organized several classes this year; one at least at pleasant grove, and also had occasional preaching there, being included in the Porter County mission. mention these things that you may see the commencement and progress of religious matters in this community. The Baptist people at Cedar Lake also held frequent meetings this year, and I think had preaching at Judge Ball's who settled there this year—

John Hack, the patriarch and leader of the large German Settlement we now have in the County, came in and settled where he now lives in the fall of this year.

The two bridges on the prairie North of Crown Point were built during this summer by Daniel May & Hiram Nordyke at an expense of \$500. Also one across West creek by Nehermiah Hayden, near Judge Wilkinson's for \$400; one across Cedar Creek near Lewis Warriner's by Stephen P. Stringham & Robert Wilkinson, for \$200—one across Deep River at Benajah Wilkinson's by A. S. Ball for \$400, besides several smaller ones, by means of the 3 pr. ct. fund.

Walton's saw mill on Turkey Creek, Wood's & also Dustin's on Deep River & Taylor's on Cedar Creek, were all building during this year. But with the exception of Wood's they might as well never have been built for the good they have done. The same may be said of the one called "Miller's saw Mill" on Deep river. Dustins, Millers & Waltons have been in utter ruins for years on account of the dificulty of making a dam of dirt stand, and Taylors is about half the time without water, and the other half without a dam.

The summer of 1837 was a most excessive wet one, as in fact was that of '36.

In October '37 the first term of the Circuit Court was held by Judges Sample & Clark—Judge Crooks having previous stept out—And a very quiet and peaceable session it was, for at that time we had none of those dens of moral pestilence which have since polluted the place with drunken brawls.

It is worthy of our observation to look back and see what a change has taken place in the short space of ten years. Of nine members of the bar who attended the first term of this court, only one attended the last.

Of 28 grand & pettit jurors, only 14 remain in the county. These are John Wood, J. P. Smith, Elias Bryant, Henry Wells, Wm. W. Payne, Levi D. Jones & Geo. Earle, who were on the first Grand Jury. And Orrin Smith, Daniel May, Richd. Fansher, Robt. Wilkinson, Jonan Brown, J. V. Johns & Stephen P. Stringham, who were on the first pettit jury—One of the other 14, old Mr. Thomas Sawyer, died here, and the other 13 have moved from the county. I have already shown that the change in the whole population has even exceeded this ratio.

At the first term there were 30 cases on the docket, which was certainly a pretty strong beginning in law for a new county—Of the 70 plaintiffs and defendants then here, only 15 are here now. And only three of the absent ones died here. These were Milo Robinson, Calvin Lilly & Daniel Cross. The first marriage license issued in the county was for John Russell & Harriet Holton—unfortunately it did not stick. A little singular that 2 out of 3 of the first marriages in the county should be divorced.

In the winter of 1837 & 8 congress established several mail routes through Lake County, which until then had none except the old route from Detroit to Fort Dearborn. One of these routes was from here to Monticello in White County & was taken by Mr. Pelton, but was afterwards found to be through such an interminable wilderness that it was discontinued. One from La Porte to Joliet, also

taken by Mr. Pelton is still in operation. The route from Michigan City to Peoria was let to be carried in four horse post coaches, but never put in operation. The mail now carried by Mr. Wells from City West to West Creek is a remnant of this route. It is worthy of remark that when I was appointed Post-Master here, there was not another office in all the county west of La Porte to Joliet & Chicago.

The summer of 1838 was one of severe drouth & great sickness & probably more deaths in proportion to the population than in any other year up to this time, since the commencement of the settlement. So great was the drouth in the fall that the muskrats were driven out of their usual haunts & frequently burnt out by the fall fires running over the marshes, and were found wandering about in search of water. One of them came into my house but never so much as asked for a drink of whiskey, but made his way through & went directly where "the old oaken bucket, the moss covered bucket" contained a more natural beverage for a thirsty muskrat, and I was obliged to cover the well to keep them out. saw many places where the autumn fires burnt off all the sod, and hundreds of the houses of these animals were of course burnt up. Much damage was done to fences and crops—The old adage that "Winter never sets in till the swamps are filled in" failed this year, for

During the continuance of the drouth, winter commenced. I remember that snow fell some inches deep during the October court, and the ground frose up directly after & in it lots of small potatoes.

A large addition was made this year to the German Settlement. The Baptist church at Cedar Lake was organised, and preaching pretty frequent by Elder French and Elder Witherel & Deacon Warriner.

In November of this year, Judge Clarke & myself proved out our pre-emption rights & got a title to the land where Crown Point is located. A number of others also in different parts of the County did likewise. Before

this all were squatters—The settlers having now began to raise bread stuff, found it no fool of a job to go 40 miles to mill. But they had to do it.

There were a good many improvements made this year, for these were the days of "Wildcat" Money. The tavern house at Liverpool was completed, and a line of daily stages run upon that road; though upon reflection, I believe they were in operation the year before. Mr. Eddy completed his house and moved his family into the county some time in the summer of this year.

The selection of lands in this county for the Wabash Canal was made in June of this year. Col. John Vawter, was one of the commissioners & preached in the court room while here, to a very respectable congregation.

The Methodist Episcopal Church may be considered as regularly organized in this county from this time, forming with Porter County a circuit, and supplied with preaching at stated times.

The drouth of this year was the cause of setting a great number of persons to digging wells. Heretofore they had depended upon water in ponds and marshes, the drying up of which put them to great inconvenience, particularly for stock water after winter set in. One circumstance worth noticing in connection with this subject, may be mentioned in regard to Cedar Lake. This beautiful sheet of water was so affected that all around the edge of the water it was covered with a thick scum so offensive that no one could use the water without being disgusted.

The health of the settlers the two last seasons goes to prove that a dry season will always be found far more sickly than a wet one.

On the first of January, 1839, my brother Milo died of consumption. This was the first death that occurred in the vicinity of Crown Point. It ever has been considered a remarkably healthy place. In fact the strongest inducement with me to settle here, was, that I heard that it was a favorite summer residence of the Indians, and a spot to which they always resorted for recovery of health which

they had lost in more unhealthy locations. When first seen, too, in a complete state of nature, it seemed one of the most lovely spots I ever saw in its natural condition. It is a pleasant spot still.

The most remarkable feature in the history of the summer of 1839 is the location of the county seat at Liverpool, by commissioners appointed by the Legislature the winter previous. And the sale of public lands of the U.S. in March of this year.

Liverpool, Cedar Lake & this place were the contending parties for the location of the county seat.

How it ever was fixed at Liverpool, some of the commissioners know & no one else. The location created a very strong opposition in all the south and central parts of the county.

The county officers & county were urged not to move there, until the Legislature would be petitioned for a relocation.

On examination of the law fixing the seat of justice temporarily at this place it was found that they could not be compelled to move to the new county seat until suitable public buildings were erected.

Although the proprietors of the town went to work immediately to provide a court house it never was completed, although nearly so.

It stood for several years a monument of a very bad speculation & finally fell into the hands of Mr. Earle & by him was sold and to be pulled down & floated down the river to Blue Island where it was re-erected in 1846 for a tavern. And with it has gone almost the last hope of a town at that place.

After the death of my brother, Sheriff Fowler kept the home as a tavern until the fall when he moved to Lockport, Ill. & remained till the work upon the canal was suspended. Although he did not keep such a sink of drunken abominations as has since been kept in the place, he had not then learnt the blessings of temperance that he has since enjoyed the benefit of.

J. V. Johns was elected Sheriff this August election—H. N. Brooks was his apponant. The election was contested and created some excitement at the time. It cost Brooks 40 or 50\$ without gaining the office—a poor speculation for him. One witness testified that he would not vote for either, because one was a drunkard & tother a blackguard—too true.

After Mr. Fowler abdicated the office of Crown Point tavern keeper, Mr. Pelton took a wife & took the house which he afterwards purchased & has occupied ever since.

Dr. Lilley, who flourished at Cedar Lake as a merchant & tavern keeper, builder of mills & founder of a town &c &c &c & & died this summer of the disease that sweeps off so many of the lovers of strong drink, and the place that in those days was so well known is almost as dead as its former proprietor & as little known to the present population. The change that a few years work in a new country is indeed wonderful. The population is continually changing—out of perhaps 20 families of the original settlers around this Lake, only two or 3 remain.

In the winter of 1839-40 an act was passed for a relocation of the County Seat. The commissioners met in June—The contest was strong between the centre and Cedar Lake and the offers of donations very large. The proprietors of Liverpool gave up when they found that a large majority of the county was so strong against them.

But Mr. McCarty having become a proprietor in place of Dr. Lilley had laid out a town on the East shore of the Lake, which he called West Point, made desperate efforts to obtain the location there. It is a happy thing that he did not succeed; for as I before stated, the water of the Lake could not be depended upon for use, and several wells that have since been dug, have proved to be so impregnated with some mineral that the water is an active cathartic.

¹ After losing the county seat contest, the descendants of Obadiah Taylor moved to Lake Prairie, about a mile and a quarter south of Cedar Lake. They took the post office and the Cedar Lake Baptist Church and Sunday School with them. The community is now known as Creston.

So the town would have been without a supply of that very first necessary & indespensible article—good water—which would have been a sure place for using a little of the "critter" to molify the water—and a re-location of the county seat would have had to be made, probably at a great loss to the county. Or else the inhabitants might have drank more whiskey than is even drunk in Crown Point.

The county seat then was permanently located where it now is in June, 1840 by Jessee Tomlinson & Edward Moore of Warren Co.—Henry Barclay of Pulaski Co. Joshua Lindsey of White Co. and Daniel Dale of Carrol County.

Shortly after the location the town was laid off into seventy-five lots, the most of them containing half an acre. There are four principal streets running North & South, one of which is 100 ft. wide & the other 60 ft. with cross streets of 30 ft. There is a very large common or public square in the centre that never can be built upon & an acre of ground devoted exclusively for the Court House & public offices. Another acre is devoted to the purpose of a school, where the school house now stands. The town was laid out upon 60 acres-20 of Judge Clark's & 40 of mine. The Judge gave the streets & 1/2 of the common & one half the lots & 35 acres adjoining on the East, and I gave the same number of lots & common & the court house lot & 20 acres adjoining on the West, five acres of which are laid out in lots including the school lot, which is a part of the 60 acres comprised within the town. There were many other donations for labor, money &c. & 25 acres of land—10 by Mr. Eddy & 15 by J. W. Holton. In point of fact, although Dr. Farrington, Mr. Farwell, Mr. Allman, Mr. Lamb & Mr. Holden, Mr. Sheehan, Mr. Wm. Holton & Mr. Eddy, Mr. Townly live at Crown Point they don't live within the town limits.

Nov. 19th, 1840, the first lots were sold at auction by Mr. Geo. Earle, County Agent, Judge Clark & myself, at prices varying from \$11 to \$127.50 on 2, 3 & 4 years

credit—one year without interest. And from this time the town of Crown Point dates its existance. I have before stated that the census of the County taken this year showed our population to be 1468—The great wheat blight occurred this summer of 1840—The whole crop was entirely lost.

The first house built in town after it had a name, was that where Capt. Smith now lives. I built it for Elder Norman Warriner in the spring of 1841, and he was the first minister of the gospel settled here, and I believe in the county. He was ordained at Cedar Lake, pastor of the Baptist church. And I look upon it as a great loss to the county, I might say disgrace; that for want of support he had to leave it. Rev. Mr. Brown, pastor of the Presbyterian Church at Valparaiso or Mr. Warriner preached here this summer, nearly every Sabbath.

Major C. Farwell built the same year—he was the first blacksmith here, and one of the first in the county—his father having settled on West Creek in 1836. Old Mrs. Farwell was undoubtedly the first white woman ever upon the ground where this town is located, for in 1833 her husband & family were endeavoring to follow the old Sac trail from La Porte to Hickory Creek, Ill. where a settlement was forming, and got astray, and spent the 4th of July, 1833 upon this ground, while a messinger went back for a pilot to extricate them from their lost situation. Think of that only 14 years ago.

In June 1841, three individuals made the first effort to form a temperance society here—Your records will show that it was carried into effect, & the celebration of fourth of July with cold water and a picnic dinner, was the happiest one to some 300 men, women and children that I ever saw.

The first kiln of brick about here was burnt this season by Mr. Mason & Dr. Farrington. Heretofore chimneys were all built of sticks and clay, and wells had to be walled with wood. A kiln had been burnt the year before at Cedar Lake, and a small one previous to that by Ben Stoleup but they were unfit for wells. Brick chimneys & frame buildings now began to show an improving condition of things. Thus it is, little by little, & slowly, that the improvement of a new country creeps along. In riding over the county this year we begin to discover here and there a new barn and brick chimneys peering above the roofs of frame houses.

In the spring of 1842, Mr. Wells built his large tavern house in Crown Point & opened a store in one end of it, and a very bad whiskey shop in the other. I cannot say that this improvement has ever improved the morals of the place. Certain it is, it has been the ruin of the owner.

This year we had the benefit of the first grist mill in the county, built by Mr. Wood at his saw mill on Deep River & put in operation the past fall by Charles Wilson, who has since built a windmill on horse prairie—I speak it prophetically that the time will soon come when there will be one of the recently patented centrifugal wind mills in every neighborhood in this county.

This year a frame school house was built in Crown Point, which was the first respectable one in the county, and I fear that the same remark is still too true; for a decent provision for schools has hardly been yet made in any district in the county.

And I don't mean to be understood that the Crown Point school house is at all worthy the name of a decent one for the place; for it is not. Although it is better than the little old black log cabin which was in use previous to the building of this one, this is entirely too small for a community of such good christians as this is, for verily they keep that part of the law of scripture which commands them to "multiply" and the earth is "replenished," with a most rapid increase of children, whose best inheritance would be a good education. But they cannot obtain it here, unless parents will give them an opportunity to acquire it in a school house where there is more opportunity to expand, than in a room 15 by 20 with 50 children packed around a red hot stove. I hope that in the

next edition of this history, I shall be able to say that in the year 1847, the people determined to have a school house in Crown Point, which would be a credit to them, and in the eyes of a stranger, add much to the respectability of the place.

The winter of 1842-3 it was said, would long be remembered—How long has it been? How many of you now can remember anything remarkable of this winter that you should remember it? But few I venture to say, for such is the treachery of man's memory. Yet this was the hard The winter in which people had to dig out of the snow the neglected straw, and strip off the hay covering of old sheds & stables to feed the cattle to help them eke out an existence, until grass should grow. A period that many of them failed to see, for every resource of feed utterly failed their owners, and the poor brutes actually starved to death, and that too in a country where any quantity of grass can be had for the mowing, and where thousands of tons of wheat straw are annually burned "to get it out of the way". The distress of that winter was not confined to this county—it was universal through all this region of the North West. The winter commenced the middle of Nov. and one of our citizens was frozen on the Grand prairie Nov. 17, 1842. This was William Wells, a very steady, sober and stout healthy Snow continued very late, for here we had good sleighing into April. And usually we have but very little in March, or as for that matter—but little during the winter.

In March 1843, the burying ground at Crown Point was first opened. The scarlet fever in a very malignant form paid us a sad visit. A child of Major C. Farwell was the first tenant of that ground. It is an evidence of the healthyness of our location, that from the fall of 1834 to the spring of 1843 we had no occasion for a public burying ground. But in 6 weeks of this fatal spring we made eight graves there. And while our feelings were yet tender, we promised that the ground should be fenced

& improved—perhaps our children, when they lay us there will make the same promise & keep it as well.

This summer we made an exchange of resident preachers at Crown Point, Mr. Warriner moved to Illinois & Mr. Allman moved here from Michigan. He is of the Episcopal Methodist & is a native of England. And what is much to his credit, he did not come here to tax community with his support as a preacher, for he was soon found to be a very good tailor who could fit us, the wolves with sheeps clothing. The Presbyterian Church of Crown Point was organised this year—Elias Bryant & Cyrus M. Mason elected elders-Rev. Mr. Brown of Valparaiso still officiating 1/3 the time as pastor. Two churches were built in the county this year—the Methodist Church of West Creek & the German Roman Catholic-but I think neither of them are yet finished, the latter has a bell. The Sale of canal lands lying in this county was held at Delphi in Nov. of this year.

Considerable number of sheep from Ohio were introduced into the county this year, a business that has been increasing ever since. The bounty upon the killing of prairie wolves, having tended to thin off this pest of sheep growing so that people begin to venture pretty largely into the business.

The average distance for the raisers of grain in this county to haul it to market, being not less than 40 miles, it is found that nothing but wheat will bear the expense of hauling, and that at the best poorly pays the farmer for his labor; for the average price in Chicago for a series of years, does not exceed 60 cents a bushel. The crop was nearly destroyed the past winter of '42-3 & again in the summer of 1844 many fields were so injured with rust as not to be worth cutting.

In addition to the loss from rust, it was so wet in the harvest of 1844, that teams could hardly get about in the harvest field, on account of the softness of the ground, occasioned by the great rains.

But the summer was quite healthy, and the winter of

1844-5, one of the most unusual mildness. It was also one in which death visited many families severely. The complaint was termed the lung or winter fever. I have arrived now at that point where I must mention that fact in my history—the erection of the first Church building in Crown Point—

In the summer of 1845 that beautiful structure which is such an ornament to our town, the Methodist Church of Crown Point was erected—but not completely finished off as it is now until the following season. And to keep pace with it (a snail's pace is easily kept) the foundation of that comodiously finished structure, the Presbyterian Church was laid.

But romance apart: Are these church buildings now in the condition that they should have arrived at, even at a snail's pace, in two years.

Is it creditable to the character of this community as a civilized people, to say nothing of their duty as a religious one, that they continue to meet for worship in this dirty old log house, that is not only too small, too dirty, inconvenient & unhealthy, but a dishonor to the God herein worshipped.

I hope a future historian will be able to write, that in 1847, two neatly *finished* churches in Crown Point were completed, and from that time ever forward, we were called to the hour and house of prayer by the sound of a sweet toned village bell.

The accommodation of the people of the county was greatly increased this year, in getting grain made into bread stuff, by the mill of Wilson & Sanders on Deep River below Woods, (and as he thinks not quite far enough below) and by a large mill erected at the upper rapids of the Kankakee, about ten miles west of our west line.

The crop of wheat this year was a very good one, as was also the crop of corn. Large quantities of butter were made for sale in Lake County this year, and considerable quantities of cheese—

The winter of '45 & 6 though not as mild as the last, was not at all severe. It may be worth while to record the price of land at this place for comparison with the past & future. I sold ten acres of land adjoining Crown Point on the West in a state of nature for \$20 an acre—Cash—Dec. 1845.

In the spring of 1846, Rev. Wm. Townley settled in Crown Point as pastor over the Presbyterian Church; the building for the use of this church was raised & enclosed this season & pointed the first spire to Heaven from the county seat of Lake County. Mr. George Earle started his saw mill this spring on Deep River—

The summer of '46 was very dry & very long continued hot weather, and consequently there was more sickness than ever before in any one season. Many fields of grain wasted uncut or unstacked, because the owner could not himself save it, or procure any of his neighbors when all were equally sick, to save it for him.

Much of the wheat this year was badly shrunk and that universal calamity, the potato rot, destroyed half of that crop. Corn was good, as usualy it is.

Owing to the universal sickness, it was supposed that there would be a great scarcity of hay for the winter of '46-7, but the season for cutting wild hay continued very late in the fall & the winter proved so mild that not much scarcity has been felt. Although the spring is extremely backward & grass affords but poor feed at this time.

I have now brought a slight sketch of the history of Lake County down to the present time; and have only a few general remarks to make & then I have done my task—I cannot give the exact number of inhabitants in this county, but think as before stated it cannot be less than 3000.

I have stated some of the disadvantages the early settlers labored under in regard to mails & post offices. Now there are 7 post offices in the county—A mail twice a week from La Porte to Joliet suplies the county seat—There is a mail through the south part of the county,

from Valparaiso once a week to West Creek & another from West Creek to City West—There are five sawmills in operation in the County, to-wit: Earle's Dustin's & Wood's on Deep River; McCarty's on Cedar Creek & Foley's on a branch of Cedar Creek. There are three dilapidated ones towit: Miller's & Dustin's old mills on Deep river and Walton's on Turkey Creek—the last about being repaired.

There has also been two other beginnings of mills—one on Plum Creek & one on Cedar Creek.

There are two grist mills, Wood's & Wilson & Saunders three run of stone—Mr. Earle is also engaged at the present time in building another which will have from 2 to 4 run.

There are about fifty frame houses at this time in the county—five churches ie. one Roman Catholic on prairie West, one Methodist Episcopal at lower bridge of West Creek, one ditto at hickory point, one ditto in Crown Point, the three first so far completed as to be in constant use, one Presbyterian at Crown Point. There are two brick dwelling houses—two public offices of brick—and several small out buildings of brick at Crown Point—these are the only ones in the county—the first one of these was built in the fall of 1844—There are some 4 or 5 stores in the county—ie.—H. S. Pelton & Wm. Alton, at Crown Point, Mr. Taylor at Pleasant Grove—a small stock at Wood's mills & another in the German Settlement over West.

The majority of the inhabitants are Yorkers & Yankees. There are about 100 families of Germans—some 15 families of Irish & about a dozen of English. There are 6 or 7 physicians in the county that depend on their practice for a living. There are 5 local preachers of the Methodist Church & one circuit or mission preacher, residing in the county; and one presbyterian—the Catholic Church are visited by a missionary at short intervals.

There are two attornies, with scarcely practice enough to support one—The County officers in April 1847 are Henry Wells, Sheriff; H. D. Palmer, Associate judge & one vacancy & Hervey Ball, probate judge. D. K. Pettibone, Clerk, Joseph Jackson, County Auditor, Major Allman, Recorder, Wm. C. Farrington, Treasurer, Alex McDonald, Assessor, S. T. Green, H. S. Pelton & Robt. Wilkinson, County Comrs.

There are 15 Justices of the Peace in the County, some of whom do not have a dozen cases a year, while the number upon the docket supposed to be much the largest of any one in the county; from April 1st, 1846 to Apl. 1 '47 number only one hundred—among which there is only one judgment & fine for a breach of the peace. Our jail has been tenantless for years.

There are only two open & notorious drinking shops in the county, though the vile body & soul destroying poison, is peddled out by some half dozen road side tavern keepers & at two stores in the county; one of the owners of which however has lately met with such a change of heart as we hope will induce him to quit the wicked trafic, particularly filling the pint bottles of notorious drunkards.

The county seat is the only village in Lake County. It contains about 30 families—2 churches building—2 stores, 1 tavern—2 convenient public offices—1 school house—and the usual quota of mechanics, as carpenters, mason, wagon-makers, blacksmiths, tailors, shoemakers, 4 doctors & 3 preachers.

The town is located upon a piece of gently modulating prairie along the eastern border of a grove of oak & hickory, which together with the growing shade trees that have been planted & a goodly number of fruit trees, gives the town in summer a cool and pleasant appearance. And when seen in a clear morning as you approach from the North East, where the view extends six or seven miles across the prairie the view is such as I have never seen exceeded.

I have a few remarks upon the face of the country, to show its general appearance & quality of soil & capability of sustaining a dense population, and then I will close.

There are about 100 sections of land in the north part of the county which are in a great measure unfit for cultivation, one half entirely so, without great expense of draining. The land is a continued succession of sand ridges and marshes—those ridges in the North West part, low and narrow, conforming with the bend of the Lake Shore, and originaly covered with a valuable growth of pine & cedar, which has been nearly all stript off to build up Chicago.

In the North East the sand hills are very abrupt & have yet some good pine timber, though very dificult to obtain.

As we recede from the Lake Shore, the sand ridges grow broader & intervals less marshy until they finaly unite with the prairie, as we see north of Turkey Creek and along the hickory creek road.

After leaving the pine, the greater part of the timber is scrubby black oak, with here and there a little white oak—on Deep River South east of Liverpool there is some excellent white oak timber on the Calamic, towards the Illinois line, there are a few hundred acres of tolerable good prairie, and also in Town. 35, Range 8 North of Turkey Creek; and with this exception, there is no prairie other than marsh prairie until we get south of that creek.

Then upon a line running South in Range 8, between the Crown Point timber & school grove, we should pass over continuous prairie where an unbroken furrow when I came here could have been plowed more than 15 miles to the Kankakee marsh; which embraces all the South part of the county and contains about 75 sections; though not that much of marsh, for there are many islands & large tracts of swamp timber that is very valuable, though it can only be obtained in the winter. There are also many spots of excellant dry land that might be cultivated if they could be got at. Indeed the time may come when the entire marsh may be put under cultivation; for it is a fact that the government of Holland are now engaged in pumping by steam, the water out of a Lake that

is 13 feet deep on an average and nearly as large as half of Lake County, for the purpose of cultivating its bed. How much less work it would be to bring the whole Kankakee marsh into cultivation, than it is to pump dry such a Lake and keep continually pumping afterwards to keep it dry.

The great quantity of marshy land in the North & South parts of the county are not certainly what we would desire, but the central part contains besides the marshy extremities that I have described, between 3 & 400 sections of most excellant arable land—about three quarters of which is prairie, mostly of a soil of black clayey loam with a trace of beach sand, lying upon a substructure of exceedingly compact hard yellow clay, from 4 to 40 feet deep; under which we invariably find course, clean beach sand, in which we get clear sweet water.

The timber is mostly white oak, with black oak, burr oak & hickory and the land more clayey than the prairie—Much of the timber near the Kankakee is swamp ash—There is one island of very fine sugar maple near the S. W. corner. The timber upon the islands in the marsh grows tall & straight, but upon the upland, it is generally short & scattering; the annual burning prevents undergrowth.

The soil in its native state produces first rate wheat, but it is probably more liable to winter kill, than upon more sandy land; though it seems now that the last winter has killed the crop upon all kinds of land. In fact it is a very uncertain in this county. It also produces well in oats, spring wheat, corn, buckwheat, potatoes, turnips & all kinds of garden vines & vegetables; and certainly no country can show a finer growth of fruit trees.

Of wild fruits, there is a most abundant supply of cranberries and many of the sand ridges north of turkey creek are covered with whortleberries, strawberries, blackberries, plums & crab apples also abound.

Of wild game, deer are tolerably plenty; but the feathered tribe, such as geese, brant, ducks, swans, sand hill

cranes & prairie hens, must be seen to believe what quantities exist here.

The only noxous animals are prairie wolves, which were so abundent and bold when I first settled here that they would almost steal a fellow's supper from his plate. In fact I knew one instance where some men were camping just where Mr. Eddy's house now stands, & while they were lying with their feet to the fire, one of the *varmints* crept up & stole a quarter of venison that was roasting upon a stick stuck in the ground; but before he could get off with his hot supper, one of the men raised up in his bed & his rifle being within reach he shot him dead.

But they have now got well learnt that white folks do not hold a wolf's life sacred, as the Indians used to. There has been one bear seen and killed in the county since its first settlement.

Of reptiles, the massasaugas rattle snake is the only very troublesome one, and I don't know of but one death occasioned by the bite of one of them, since the settlement of the county, this was a son of Elias Bryant. It is also said that a snake bite was the remote cause of the death of Mrs. Van Volkenburgh.

Of troublesome insects, the flies that torment our horses & cattle this summer are enough to make any reasonable man thankful that he was not born a horse.

Although I have never found the place in the county where mosquitoes are *very* plenty I am often reminded by the few that I do find here & there, of the anecdote of the man on the bank of the Mississippi river who seemed to be very busy with both hands, brushing away for life, was enquired of by a traveler if mosquitoes were not troublesome there; who replied no—brushing them off his face at the same time with both hands—no, not very, but just down below they are thick as hell. It is much the case here, although nobody owns the spot where they are, they are very thick *just down below*.

You have now patiently followed me step by step &

seen the progress of the settlement of this county from the first commencement up to the spring of 1847. What a change, what a wonderful change in 12 years—Who can realise it—and yet the change in the next 12 years will be still greater—can you realise that—no-no-no.

I am aware that much that I have here said to you is now uninteresting, because you say—"Why I knew that before"—but let me assure you that if these leaves could be sealed up for one hundred years, and then opened and read to an audience in this town, that little merit as they possess, they would excite the most profound interest in all who should hear. And it is not improbable but that they might be now read with interest, a thousand miles from here—

I have only written for a beginning of the history of Lake County, will you all now help to continue the record. Remember that we are all rapidly passing away, and in a few years the place that now knows us will know us no more, and those that come after us will not know these things. We plant trees—we build houses—we make farms for those who are to fill our places—And why not write our early history. I am aware that this sketch is a meager one. But I could not make it more full without fear of tiring your patience—But each one of you can make additions, leave the facts upon record & believe me that the time will come when they will all be more interesting, than this, my first effort, has been to you.

Though from the attention with which you have listened to me, I have reason to hope that I have helped you to pass an evening more pleasantly & more profitably, than those do who spend their days and nights in seeking pleasures by steeping their senses in the ruinous forgetfulness of beastly drunkenness.

That you may all live to see the day when drunkenness shall be among the things that once were but now are not, is the most ardent wish of your friend and fellow laborer in the good cause in which the Lake County Temperance Society are now engaged in trying to promote.

That you may be able to do this, I pray you to persevere in this good cause. And as for myself, I will ask for no prouder monument to my fame than to be assured that the members of this society will stand as mourners around my grave, and pointing to the lifeless form beneath the falling sod, shall truly say there lies a brother who in his life had an ardent desire to promote the happiness of his fellow creatures—May his historian be able to record that in the later years of his life he was eminently successful in this—and particularly so upon this evening.

## TEMPERANCE SONG

A NEW VERSION OF "COME, COME AWAY."

By Solon Robinson, Esq.

[Valparaiso Western Ranger, May 26, 1847]

[May 26?, 1847]

Come, come away, from drinking and carousing, Health, wealth and joy, it will destroy,

Oh! come, come away!

Oh! come where friends will welcome you, And where with love and friendship true Hearts their love renew,

Oh! come, come away!1

From cup and from bowl, with poison overflowing, From life's dread snare, death and despair,<sup>2</sup>

Oh! come, come away!
Oh! come where wife and happy home,
And smiling children love to roam,

¹ An issue of the Western Ranger—bearing the name of D. K. Pettibone, one-time clerk of Lake County—now in the bound volume of the Ranger in the Valparaiso Public Library, contains the following penciled corrections to this stanza:

Line 1: "O come, come away, from drinking and carousing" Last three lines: "And where we all may join anew,

In love and friendship true, Oh! come, come away!"

 $^{\rm 2}$  See note 1. This line is corrected to: "From life's dread snare, and dark despair."

Make home a happy home, Oh! come, come away!

From days idly spent, with the tyrant o'er you reigning, What can you gain, but woe and pain,

Oh! come, come away!
And while we sing of pleasure true,
A social pledge once more renew,
Of hope, joy, liberty,
Oh! come, come away!

And here with your voice and jouful song upraising, From Bacchus' din of woe and sin,

Oh! come, come away!

For now your course, your life destroys

It ruins health and earthly joys,

The cup falls, while it cloys,

Oh! come, come away!

# A RAMBLING LETTER UPON GEOLOGY AND SOME OTHER MATTERS.

[Daily Cincinnati Gazette, June 14, 1847]

[May 27, 1847]

To Dr. John Locke<sup>1</sup>—Dear Sir:—When a resident of Cincinnati some years ago, I enjoyed a slight acquaintance with you, and presume upon that to address this note to you

I have been highly interested with the letters addressed to you by your excellent correspondent "D. C.," particu-

¹ John Locke, born at Lempster, New Hampshire, February 19, 1792; died at Cincinnati, Ohio, July 10, 1856. Physician, scientist, and inventor. Wrote Outlines of Botany, 1819; established the Cincinnati Female Academy in 1822; served as professor of chemistry and pharmacy in the Medical College of Ohio, 1835-1853. Between 1835 and 1840 was engaged in private geologic and paleontologic studies. Contributor to the American Journal of Science and Arts, the Transactions of the American Philosophical Society, and to the Smithsonian Contributions to Knowledge. See sketch in Dictionary of American Biography, 11:337-38.

larly No. 8, published in the Gazette of May 20th, as I have travelled over the same ground, and tried to study into the cause from the effect there visible. I first saw the sand-blows, in Scott Co., Missouri, in the fore part of the year 1845. Observing that they appeared recent, I made inquiry, and was well assured that they had continued every year, generally in February, ever since the earthquake of 1811, which destroyed New Madrid, some 30 miles south of the point I then was. People in that region have become so accustomed to these miniature earthquakes, that they are no longer regarded as phenomena. I am sorry that your correspondent could not have travelled upon that side of the Mississippi river, and observed these more recent operations of the hidden power below that still continues its uneasy workings.

I take the same view of the formation of Reelfoot Lake that D. C. does; but it is easy to account for the prevailing opinion that the bottom sunk down, because such was the fact on the New Madrid side. Small pools of water were found where it was before dry, even in cultivated fields

D C. supposes that the sand-blows were accompanied with water. I was informed that the recent ones were entirely dry sand.

In my journey south from Troy, I passed through Holly Springs, Oxford, Coffeeville, Grenada, Lexington, Benton, Raymond, Port Gibson, &c., to Natchez. I cannot describe the country over which I travelled geologically, but perhaps some extracts from my notes, descriptive of the of the country may be interesting. "Below Holly Springs the same continuation of hills of fine sand, that commenced near the north line of Mississippi, with side bottom lands upon all the streams, which are generally a fine and very adhesive clay. The timber on the hills mostly black oak; in the bottoms beach, &c, No underbrush on the hills, and trees stood wide apart and scrubby. New Oxford: noticed red sandstone, with traces of

<sup>&</sup>lt;sup>1</sup>D.C.'s series of articles was entitled "Geology of the West and South West."

iron. No saw mills—banks of streams so loose that they don't admit of sawing; beside being a mile apart, [i.e. the banks of the bottom lands.] Beds of streams very fine sand. In all the side hills, as soon the timber is removed, immense gullies occur. Face of the country exceedingly uneven, and the soil so fine and light, that unless hill sides are cultivated upon the level system with side hill ditches, it runs off almost as free as water. Upon some of the highest peaks of these volcanic hills are large masses of heavy, red stone, in cubical form, having the appearance of melted sand, mixed with iron. Occasionally the hills are covered with pitch pine. Around Raymond the country is more level and more claveysometimes the color of this clay approaches nearly to white. Towards Natchez, the streams seem to run in beds of loose sand, and in places where the roots have decayed, channels of immense width are cut out, and which are widening with every freshet

"The country around Natchez is well worthy the attention of Geologists. The town is built upon a bluff some 300 feet high, of an alluvial deposit that appears to been formed at one time in an eddy of water of that depth."

If you, sir, or your correspondent, will make a trip to Natchez, and then come by land about 100 miles up to Vicksburgh, you will find more to interest you, than upon any other 100 miles of alluvial deposit in the west.

And if you will call on Col. Wales, at Washington, 6 miles east of Natchez, you will not only find a very interesting cabinet, but a gentleman, willing and qualified to give a fund of information in relation to that locality.

<sup>1</sup>B. L. C. Wailes, state geologist of Mississippi. The Wailes family originally emigrated from Maryland and settled near Natchez. Wailes wrote numerous articles on agriculture including indigo cultivation, the adoption of the cotton gin, and the introduction of Mexican cotton in Mississippi. Also made a report on the Agriculture and Geology of Mississippi, in 1854. Rowland, Dunbar, History of Mississippi. The Heart of the South, 1:39-40, 289-91, 342; 2:512, 515-17, 666 (S. J. Clarke Publishing Co., Chicago-Jackson, 1925); Biographical and Historical Memoirs of Mississippi, 1:13.

As your letters written during your travels over the country are read with so much pleasure by all your numerous acquaintances, as well as those of your correspondent D.C, I hope one or both of you will find it convenient to visit this part of Mississippi, and publish your opinion as to how and when that great deposit was made.

I wish to know whether there is good ground for believing that the Cumberland mountains once extended across the Mississippi and united with those now seen in the southwest part of Missouri, by which all the country between the Alleghanies and Rocky mountains was covered with an immense Lake, and when the gap where the great river now flows, was thrown down by the earthquakes that still continue their operations, in the same vicinity, if the enormous mass of alluvial deposit below was then made, which has since been disturbed and thrown into all sorts of odd shaped hills by the further action of volcanic power. I am sure the world would be interested in reading your opinion upon this matter, after examining the country indicated. I am sure you would be interested in the examination.

My present residence is near the head of Lake Michigan, where the action of water in the formation of all the land around me is very visible. The surface is black, vegetable mold, with a trace of beach sand, lying upon a bed varying from one to fifty feet of very hard yellowish brown clay, that breaks out in cubes, and is intermixed with flat gravel in small quantities, and sometimes boulders, which are very frequent on the surface. Under the clay lies clean beach sand, just as it was deposited by the waves. A few feet into this sand clear water is always found. In some places the sand comes to the surface without any intervening clay. There are no rocks either primitive or secondary in this part of Indiana. But within a few miles of the State line over in Illinois. the limestone crosses out, and 40 miles west, at Joliet. the bottom of the O'Plain river is solid limestone. The original bed of this river is a mile wide, channel cut down into

the lime rock, showing that here once flowed the outlet of Lake Michigan.

Twenty-five miles south of Joliet commence the great coal fields of Illinois.

But I am rambling on, quite uninteresting, perhaps, to you or any others, who will read this letter. I will therefore close abruptly.

I am, with much respect,

Solon Robinson.

CROWN POINT, Lake Co., Ia., May 27, 1847.

ODDS AND ENDS FROM AN ODD END. [Chicago Prairie Farmer, 7:204-5; July, 1847]

[June, 1847]

MESSRS. EDITORS: I am called upon by one of your correspondents in the June number for "light"—moonlight at that. "Alas, my sun has set." I am but the feeble reflection of a passing shadow. The little light I once gave out, I have not "hid under a bushel," but it has been dimmed upon a bed of long-continued illness.

The most that I can "enlighten" Dr. Rousseau<sup>1</sup> on the subject of the influence of the goddess Luna upon sublunary things, is to assure him that I most sincerely believe it is "all moonshine."

In the early ages of the world, when men's minds were in a state of semi-barbarism, when stars were studied before books, the sun and moon came to be looked upon with awe and reverence; and as the effect of the sun upon vegetation was palpable to the senses, it was but natural that it should come to be believed by a people who had a special deity for every fruit and flower and tree, brook, grove, and mount or sea, that the moon also performed

<sup>1</sup> Dr. J. A. Rousseau, Elm Grove, Marion County, Iowa. Correspondent of the *Prairie Farmer*, 1847-1850. Frequently wrote about animals and their diseases. Robinson's comment refers to an article on "The Moon," 7:196, asking his views on the influence of the moon on vegetation. See also "The Moon Doctrine," written probably by one of the editors, in *ibid.*, 8:18-20 (January, 1848).

a part in the wonderful works of nature. I trust that time will teach mankind that it is utterly inconsistent with reason to believe that the moon can creep into the dinner pot to shrink or swell the meat, or that the rails of a fence which are laid up in the old of the moon will sink into the earth any quicker than those laid in the newness of her majesty's monthly appearance.

As for "experience," I have had my share of it in a somewhat checkered life, among a vast number of my fellow men, and have surely tried to profit by my own and their experience in the matter of "the signs" and influences of the moon upon animal and vegetable life; and I must honestly say that I never have seen one iota of evidence in favor of their theory. And if Jupiter in his haste to "rise and snuff the moon" some dark night, should snuff her ladyship out, I should not apprehend the least effect whatever upon "seed time and harvest."

Now as it is a pity to send you any blank paper, and as I have yet my lamp trimmed and burning, will you allow me to comment a little upon some other articles? Perhaps I may be able to shed as much influence as the moon does. And first—

Comments upon "Comments." I will bet a dozen apples of that interesting variety known as "five to the pint" that the "seedling orchardist" spoken of by Mr. Hardup, is a firm believer in lunar influences.

"Grapes." Here I must differ. "Every person who is desirous of growing the grape, if he chooses can" not grow them: for the reason that a clay soil with a hard, cold, wet subsoil, will not grow the vines to any degree of perfection.

"Shooting Hogs" is the only effectual remedy that can ever be applied to that system of piracy which fills our streets and commons with hordes of robbers which steal, ruin, and destroy the property and peace of every community where permitted. I will go 40 miles to visit a man who keeps a rifle to extirpate the evil.

<sup>&</sup>lt;sup>1</sup> A pseudonym used by a reviewer of the Prairie Farmer.

"Lombardy Poplar for hedge." Just as good in the long run as any thing else.

"Picket Fence." If those who build picket fence will only nail a strip of board *over* the pickets, with a tenpenny nail through each one into the girts, top and bottom, the hogs will not root off the pickets as they now do.

"Rolling Wheat" it is thought will be found beneficial; I have no doubt of it: but the wheat crops of our western prairies will never be rolled. Sheep can doubtless be substituted for the roller with decieed advantage.

I intend to address Mr. Shillaber<sup>1</sup> upon some of the subjects he speaks of, in the course of the summer; but I shall do it face to face, while enjoying his hospitality.

The "Missouri Barn" plan,<sup>2</sup> is not suited to this meridian. The timber of which it is composed would be a fortune on some of our prairies. Such a shed as that, however, where practicable, would be found to be one of the greatest conveniences upon a farm. It should be high enough to drive under a load of grain if necessary when a shower is approaching.

I have often thought that an oil cloth (tarpaulin) large enough to cover a load of wheat or half-built stack would be one of the most useful things that a prairie farmer could own. It would be truly a labor saving farm implement.

"Discouragements." A certain remedy against the "skinning system" of the doctors, is not to employ them. Try it and live—and let them live if they can. Use preventives against the universal bilious complaints of this country, and you will want less curatives.

"The Potato Worm" I believe is identical with the "tobacco worm" that infests the tobacco fields of the South in vast numbers, and which have to be destroyed or they will destroy the crop. The term "worming to-

<sup>&</sup>lt;sup>1</sup> John Shillaber, Dixon, Illinois. Correspondent of the Albany *Cultivator* and *Prairie Farmer*. His article in the June number of the *Prairie Farmer* (7:176) touched upon "Want of Implements. Crops. Lee Co. for Immigrants."

<sup>&</sup>lt;sup>2</sup> An article by A. M'Korkle, in *Prairie Farmer*, 7:177.

bacco" means going daily through the fields and gathering these offensive and disgusting monsters in the hand and crushing them. By the bye, of the two classes of tobacco chewers, I don't know which is the most disgusting, the human or the inhuman. The worms however seem to be benefited by such food, and that is more than any human chewer of food fit for worms can say.

"There are no toads here." That means Chicago exclusively, I suppose; because I have some of the "biggest and best" I ever saw. One famous old fellow has been a pet of ours these ten years: Every child about the place knows "father's old toad," and under no circumstances must the innocent and useful creatures be injured.

"The Cactus." "The lover of flowers who has not seen the bloom of the cactus is to be pitied." The term cactus as here used is too indefinite. Children, Messrs. Editors, read your paper, and should be told to which of the great family of plants bearing this general name you allude: since the term reaches from the great American Aloe, or Century Plant, *Agave Americanum*, down to the little humble "prickly pear."

"The dandelion can be easily grown from seed." What

for? [Greens. Ed.]

"Those Alpaccas" are coming—in a national vessel, too. Think of that, ye "strict constructionists," who stickle that the general government has no right or authority in the constitution to build harbors any where upon fresh water for the purpose of saving human life. Will it be any less unconstitutional to devote a few dollars to bring home some of these valuable animals than it would to dig out a little of the mud in the mouth of Chicago River, or

<sup>1</sup> In August, 1846, President Polk vetoed the Rivers and Harbors Bill, which carried an appropriation for improving the Chicago River channel, upon which over \$247,000 had been expended between 1833 and 1846. On July 5, 1847, a great River and Harbor Convention opened in Chicago. The address to Congress, prepared by the convention, reviewed the entire history of waterways in this country, argued constitutional questions involved, discussed the subject from a political angle, and included other matters pertaining to the welfare of the West. Nothing was done for the Chicago

deepen the channel over the St. Clair flats? None but flats will say so.

"Feed for fattening cattle." In my opinion no other feed can come in competition with corn at 25 cents a bushel for this purpose; and this is higher than the average in this country.

And will you tell why "corn meal is not well adapted for milch cows."

"Clay Houses," built with soft clay in molds, always have the door and window frames inserted while building. The best way to hold the boards in position is by iron rods, two at each end and one in the middle. On the middle of the face of the door and window frames next the clay, a strip of board should be nailed, two or three inches wide, and the same length and breadth of frames. This holds them in place and also prevents a passage for air between the wood and clay.

The molds, so far as I have seen used, were sixteen inches deep, made of inch boards, planed and strongly battened, and no matter what length, as they are always made to go quite round the building, so that a course of clay upon each of the walls is put on at the same time, the same height all round. The frames do not interfere with the mold boards, as these go over them.

The molds remain on 24 hours, and then it takes two or three days of drying for the walls to be fit another course.

"Western Agricultural Societies — Where are they?" Echo answers—

"Mode of Feeding Corn." That word "feeding" should have been hauling. I thank you, Mr. C.2 for that article.

Harbor until 1852, when \$20,000 was appropriated and expended in improving the inner harbor. Andreas, A.T., *History of Chicago*..., 1:233-38 (Chicago, 1884). The proceedings of the convention are printed in *Fergus' Historical Series*, 3:no.18 (Chicago, 1882). Robinson was a delegate from Indiana to the convention.

<sup>&</sup>quot;'Clay Houses with Solid Walls," by George Frisbie, of Ogle County, Illinois. *Prairie Farmer*, 7:182.

<sup>&</sup>lt;sup>2</sup> W. Challacombe, of Carlinville, Illinois. *Prairie Farmer*, 7:183.

I shall adopt the same plan for the foundation of a hay rack.

But of all the machines that ever I saw for hauling corn in the shock, the Jersev mode is the best. The corn being put up in large shocks in the field, is hauled one at a time on a horse cart, in this wise. A light frame is made to take the place of the cart bed, having two long stakes behind, so that one is on each side of the shock when the cart is backed up, and the frame tipped back as though dumping a load. A small rope is now thrown over the shock, and this being attached to a small windlass on the thills and running through the forward part of the frame, on being wound up draws the shock tight to the frame, and then draws the frame down, where it is held fast; the butts of the shock hanging off behind. When arrived at the place to unload, the rope being let loose, down goes the shock, standing just as it did in the field. Where the distance is not over a mile, it is astonishing how soon a field can be cleared; and then you have the corn just where you want it to be husked as you want the stalks to feed.

The card of Messrs. Perkins & Brown¹ would have been far more interesting to wool growers in this county if it had announced that hereafter wool would be bought in Chicago at any thing like a fair price. My advice to all who have wool to sell is, not to sacrifice it as they did last year. Hold on—the price will be better; if not, it wont be worth raising.

"Mills by Wind and Water" is a windy project. It never will be put in practice. The same power that will be required to throw up water enough to run one pair of mill stones, would run two pair if applied direct.

The advantage of running during the little time the wind did not blow, would cost more than it would come to.

I knew a man in Cincinnati who spent ten thousand

<sup>&</sup>lt;sup>1</sup> A Springfield, Massachusetts, firm of wool buyers, who issued, in 1847, a circular entitled "To Wool Growers," which offered prizes for different types of wool. Printed in *Prairie Farmer*, 7:187 (June, 1847), and in *American Agriculturist*, 6:179-80 (June, 1847).

dollars upon a project of this kind—pumping up water and letting it on to a large overshot wheel, which did a fine business making flour; but he was at last compelled to believe that he lost one half of the strength of his original power, and gave up the *ignis fatuus* that had led him so far away.

I do not expect Mr. Padon<sup>1</sup> to be convinced of his error, for theorists rarely are; but I hope he will not be able to induce any one to spend his money in such a windy watery project.

"Lightening Rods." I again remind my readers that growing trees near a building are the best and cheapest conductors ever put up.

"Nailing into Clay Houses," in the belief that it will "hold as well as in pine studding," will only be believed by those whose heads are not as "hard as a brick." "This is a fact of considerable importance to builders of houses of this sort," and whoever sides up a house and depends upon clay to hold the nails, will be very apt to get his soft head hardened when the boards come tumbling over his head and ears some windy day.

The "Educational Department" in this number is rather longer than will suit the taste of most of your readers. Physic can only be given to children in small doses.

"Woodchucks." Do you expect to raise enough of these varmints to make a sufficient quantity of whips to castigate all the "rascality in these western States." If you do, I am O.P.H.—there will be no room for anybody but woodchucks.

I've done—I think I've done enough for once.

I remain that same

SOLON ROBINSON.

Crown Point, Lake co. Ia. June, 1847.

<sup>&</sup>lt;sup>1</sup> Isaac Paden, Knox County, Illinois. Correspondent of the *Prairie Farmer*, 1847. His article, "A Project for Mills by Wind and Water," appeared in the June number, 1847 (7:188).

<sup>&</sup>lt;sup>2</sup> See note on "Plastering of Clay Houses," ibid., 188-89.

## WESTERN AGRICULTURE—CORN COBS.

[New York American Agriculturist, 6:338-39; Nov., 1847]

[July, 1847]

I MADE a flying visit to our old friend Henry L. Ellsworth,<sup>2</sup> of Patent Office memory, one day last month. He is now a resident of La Fayette, Indiana, where he is farming pretty largely on the Wea Prairie, about seven miles out, on which he has a thousand acres of Indian corn in one field. The uncommon high price of corn this summer,<sup>3</sup> has been the moving cause of growing many an extra acre of it in the Wabash Valley, where, if it ripens well, it will tell a pleasing tale, not only to the cultivators, but to the starving millions of Europe.

Mr. Ellsworth is as full of enthusiasm as ever, and no less busy than he was in his office at Washington. He is an owner and manager of a vast amount of land, which he is selling, leasing, and improving, and which, together with all the business operations that he is carrying on, keeps his office crowded with the multitudes who deal with him. Yet he finds time to be continually trying some experiment, or studying out some improvements for the benefit of the agricultural community.

I saw six pigs in as many pens, just big enough to hold each occupant without exercise, which he was feeding on corn in the ear, corn ground, but fed raw, and corn-meal made into mush—two upon each kind. The pigs were all alike in age, breed, size, and weight, when commenced with, and after being fed a certain time with carefully-weighed quantities of food, they are re-weighed and weights noted, and then those which had been fed upon one kind, are changed to another and so on; and when the experiment is finished, he assured me he would pub-

<sup>&</sup>lt;sup>1</sup> Reprinted in part in Michigan Farmer, 6:45 (February 1, 1848).

<sup>&</sup>lt;sup>2</sup> See Robinson, 1:213n and Index.

<sup>&</sup>lt;sup>3</sup> On June 27, 1847, shelled corn was quoted at 35 cents to 38 cents a bushel in Chicago, as against 23 cents to 25 cents a bushel on June 27, 1846. *Prairie Farmer*, 6:232 (July, 1846), 7:232 (July, 1847).

lish the table.¹ The experiment thus far is very largely in favor of the mush, bidding fair to produce enough to pay toll and trouble for grinding, as well as for cooking, and leave a profit. The number of pounds of good thick mush, that one hundred pounds of meal, well-worked, will make, is astonishing to anyone who has never thought much upon the subject. It will not fall much if any short of six hundred pounds. Mr. Ellsworth's kettle holds just fourteen pounds of meal at a charge, and several accurate weighings give over eighty pounds when well cooked, and I saw myself that no more water was used than the meal would absorb. But it must be cooked—not merely scalded. A little salt is added, and occasionally a little sulphur.

Mr. Ellsworth assured me that he had proved the mooted point of nutritive food in corn-cobs. He says. "hogs will live and thrive upon well ground cob-meal alone! At first they did not take hold. I then added a small quantity of meal of the grain, principally to make the mass ferment quicker, and then they eat the whole, and did well. I had great difficulty in getting the cobs ground. Millers are so well satisfied in their own minds that cobs are good for nothing, that they are not willing to let the experiment be tried whether they are nourishing or not. I am satisfied that twenty-five pounds of corn-meal added to one hundred pounds of cob-meal, is more valuable for feed for growing stock, than seventyfive pounds of corn-meal alone." Such is the language of Mr. Ellsworth. Experiments of this kind should be further tried. One-fourth of the weight of a bushel of ears of corn, nature never intended should be thrown away. and cobs upon large corn-farms in the West are literally

<sup>&</sup>lt;sup>1</sup> Ellsworth made his report in a letter of December 15, 1847, to Edmund Burke, commissioner of patents. Annual Report of the Commissioner of Patents, 1847, pt. 2:534-39. See also "Remarks on the Nutritive Value of Corn Cobs," in American Agriculturist, 8:279 (September, 1849). Some of Ellsworth's later experiments on his Lafayette farm are described in *ibid.*, 8:348 (November, 1849).

thrown away.¹ They are neither used for food, fuel, feed, nor manure; for the latter is considered a nuisance.

After my visit to Mr. Ellsworth, I met with our old friend. Mr. Colt.2 of New Jersey, at the great Chicago Convention.3 Owing to the vast crowd of people and business. I did not have the opportunity that I wished to glean intelligence from so enterprising a Jersey farmer as he is well known to be; but as a matter of course, the things that our minds most did dwell upon were discussed over the dinner table, where I mentioned my conversation with Mr. Ellsworth, upon the subject of corn-cobs, and my belief that they would be highly advantageous to feed in small quantities to all kinds of stock, solely on account of the alkaline properties that many an ancient dame knows that they possess. For oft has she made cobley when pearlash was high; and even if a little should be mixed in human food it would not injure it; and in the stomach of fattening hogs particularly, it would prove an excellent corrector of acidity. This idea was nothing new to so inquiring a mind as that of Mr. C., and he told me that he had tendered a donation of one hundred dollars to the American Institute for a complete analysis of corncobs, so as to prove whether there was any nutritive quality in them.

But my opinion is, that if the hundred dollars were spent in actual experiments of feeding live stock with cob-meal, a much more satisfactory result might be arrived at, than can possibly be done by any chemical

¹In the March issue of the American Agriculturist, 1848 (7:85), Reviewer remarked that he was "glad to see . . . Mr. Robinson . . . still flying about among the pigs, and giving . . . interesting descriptions of the manner of making them into pork and other matters," but he was extremely skeptical of the value of corncobs as food.

<sup>2</sup> Roswell L. Colt, Paterson, New Jersey. Correspondent of the American Agriculturist, 1848, and Cultivator, 1850. In 1849 Mr. Colt inquired about the nutritive value of corncobs in a letter to the commissioner of the Patent Office. Report of the Commissioner of Patents, 1849, pt. 2:229.

<sup>3</sup> Chicago River and Harbor Convention. See ante, 92n-93n.

analysis. If Mr. C. himself will undertake the matter, I am sure that he will prove some facts of vast importance to the corn-growers of the United States. Where cobs are to be had in vast quantities, if they were used as fuel and the ashes carefully saved, I have no doubt that they would be found more than twice as valuable as woodashes for any purpose. If cobs are not worth feeding to stock, and not of sufficient value as manure or fuel, to be worth saving, then I am greatly mistaken, and hope to have my mind enlightened with the truth; and when that is done I shall not feel so grieved to see this bountiful product of nature lying knee-deep across the public highway in front of the door of many a hog and hommony farmer of the West. But enough about one of nature's productions which the world estimates as good for nothing.

But there is another subject that was talked over by Mr. Ellsworth and myself which I hope to see discussed in your columns, and which will afford your Reviewer an ample text, and which I hope he will discuss with all the candor that his somewhat captious pen will allow him, and not ridicule the idea because it is a new one. It is packing flour and meal, and in fact, all dry substances usually packed in barrels for a foreign market, in square packages. A barrel of flour put up in a neatly made smooth chest, would be something new. The advantages in form over that of the old one would be many, as we view the matter. Firstly, not one tree in a hundred will make barrel staves, that will make good sound boards. Secondly, they can be made cheaper than barrels. The boards can be sawed, planed, and sides and ends dove-tailed together-bottom and top cut to match in—all by machinery of the simplest forms and rapid in its operation. All but the top should be well nailed, and cut nails are cheaper than hoops. The top should be put on with wood-screws, which can be done with a very simple machine, and much quicker than the most expert workmen could head a barrel; the screws being made of

a new form on purpose for this use. It may be found necessary to put a very light iron hoop around the ends when shipped on a long voyage. Thirdly, the important advantage saved in stowage, in wagon, railroad-car, canal-boat, on shipboard, or in store. Fourthly, not one atom of leakage. Every one who has seen flour carried upon a railroad, is aware that a great many barrels which were made of timber not well seasoned, leak quite an item of the quantity to a starving man. The boxes not admitting leakage, if exposed to rain, would also save an item. Fifthly, these boxes in England, where deal-boards are sold by the pound, would always be worth more than cost, when emptied of their contents, either to work up or to be used as they are for household use; for, by adding a pair of butts, there is a good chest or cupboard; or they would always sell to dry goods or shoe-dealers for packing-boxes. Indeed, the lumber is so cheap in many of the grain-growing districts, that it would be found profitable to sell them after being emptied, in our cities. Sixthly, the absurd old fashion of selling 196 lbs. of flour in a package, would be done away with, and the boxes would always be of exact sizes, holding 50, 100, 200 lbs. &c., and sold by weight. And lastly, what are the objections? Let them be fairly stated and they shall be fairly answered (a). But I am at the end of my sheet and vet not half to the end of my story, but it must be deferred. SOLON ROBINSON.

Crown Point, Indiana, July, 1847.

'In a footnote, (a), the editor disagreed with Robinson's argument on the following grounds: "1. Economy of timber is not yet an object in this country. 2. They cannot be made so cheap as barrels, as these last are extensively made by hand at 25 cents each; and the introduction of the recently-invented barrel and stave-machines will probably materially further lessen the expense.

3. Stowage is no object, as cars, boats, and vessels already stow all the weight they can carry 4. Leakage with good barrels amounts to nothing, and with poor boxes, would be fully equal to poor barrels. The thin timber used for the former is more quickly and certainly seasoned than the latter. 5. Second-hand barrels are worth as much in proportion to their cost, as second-hand boxes

### FREE HOMESTEADS.

[Indianapolis Indiana State Sentinel (triweekly), December 14, 1847<sup>1</sup>]

[December 14?, 1847]

To the Editors of the Sentinel:

The inquiry has often been made—"Will not the Legislature, at the present session, enact a law exempting the homestead of every family of two or more persons, from execution and sale for any debt or obligation thereafter contracted?"

This question is certainly one of vast importance to the people of this State, and it is hoped that the Legislature will take it under consideration at an early day of the session.

Several of the older States have laws on this subject, and the great wonder is, that all of the States have not had laws in existence on this subject long ago. But it seems that we "hasten slowly" in any great improvement in legislative policy. It requires centuries to make a single important improvement—a single advance; and when it is made, men think strange why it were not attained at once.

In ages gone by, it was thought by some nations, that the misfortunes of a debtor should subject him to severe punishment, to imprisonment, to slavery, to even death itself. Not only this, but the laws of some governments, in the days of their barbarity and savage inhumanity, even went so far as to subject the wife and children of the debtor to perpetual servitude and slavery. But such

after arriving at their destination. 6. If it is absurd to sell 196 lbs. of flour in a package, it may be altered to packages of 50, 100, or 200 lbs. barrel-shaped, equally as if squared. 7. Boxes of the same capacity and weight as barrels are vastly weaker. 8. The breakage and waste in consequence, and the extra expense of the interminable rolling necessary from the mill to the bakery, would much increase expense of transportation. We can roll two barrels with more facility than one square box."

<sup>&</sup>lt;sup>1</sup> Reprinted in Valparaiso Western Ranger, December 22, 1847.

laws could only obtain among a people in the lowest state of barbarism and heathen darkness.

Yet such was the law of Rome in the time of the decemvirs; but such laws had to pass away before the march of enlightened reason. Still, age after age, and century after century passed away, and the unfortunate debtor continued to be punished by imprisonment, as though that would satisfy the debt, or benefit the creditor. The debtor was subjected to this species of slavery, and his family to destitution and misery, without any practical good resulting; but, instead of good, inconceivable evil. Well, this blind policy has almost entirely passed away, and a wiser one been adopted. The inhuman Shylock may weep over this as well as the ten thousand other relics of servitude and oppression which are no more.

Under such a system of legislation as we have spoken of, the aggrandizement and qualification of the malice of the Few were consulted more than the good, the comfort and the happiness of the Many. Then the people knew not their rights,—or if they knew them, they had not the power or the ability to maintain or enforce them.

But the efforts of the patriot and philanthropist of all ages, have not been made in vain: no; and the people are aware of this—they are aware that they now possess greater rights and greater comforts than those who lived in other times; they know that they can now demand, (and with some hope of success,) that which they may deem conducive to their greater happiness and comfort. The most humble, as well as the most powerful, can now, in this country, have a voice in shaping the legislation which is to govern him. Hence, legislation is beginning to be shaped more with regard to the general and absolute wants of the people.

But although it be true that much has been done, still much remains to be accomplished.

We need not now advert to that system of legislation in Europe and elsewhere, which has produced so much destitution, want and pauperism, with inevitable attendants, appalling vice, crime, and misery, which renders the suffering of the masses in that country so hideous; no, it is full well known—the starving millions there rise in attestation of the execrable system.

Then let us look around, and while it is to-day, raise our hands to stay such evils from overtaking our own heaven-favored land. Already, in some of the older States, we see destitution and want prevailing to an alarming extent, the evils of which, we need not now detail, since every journal is filled with an account of them. The anxious inquiry now seems to be, "how shall those evils be arrested, how shall they be avoided." They cannot be arrested by subjecting the destitute to greater want, and greater destitution; by circumscribing their means, or by enforcing laws more rigid, and more degrading. No; the general conclusion now seems to be, that the most effectual way to prevent such evils, is to allow every family, under whatever circumstances, the privilege of acquiring and holding, exempt from execution and sale, a sufficient amount of property to meet the absolute wants, and afford the absolute comforts of life. This can be done by exempting from execution and sale the Homestead to a limited amount, and a necessary amount of personal property. And surely this could do nobody any wrong; for when one individual entered into an engagement with another, he would do so knowing what to rely upon. Such a law could have no retrospective bearing whatever—it could operate only on the future engagements of the parties. Who can doubt the beneficial effects of a law making such an exemption? Who then will withhold his hand from this act of beneficence? Let this measure assume to party grounds—let the Legislature act as did the Legislature of the great State of New York on this subject, with an eye single to the public good.

In the opinion of the humble writer, a law making such an exemption as we have spoken of, would do more to prevent destitution and want, with their sure attendants. vice and crime, than any other legislation that could be adopted.

That certainly is a blind system of benevolence which robs with one hand and bestows in an ostensible manner charity with the other.

While man can he will. But darken every window of hope—interpose an insurmountable barrier between man and the acquirement of the absolute comforts of life—cut him off from all resources but wages—slavery; reduce him to this sad alternative, and at once a feeling of despair is aroused which awakens a demon, and precipitates him in the downward track to ruin. A man thus reduced, with a family to maintain, (to say nothing about education,) goes forth bereft, disheartened and discouraged; his desire to pay, to maintain and educate his family, is crushed beneath the weight of his inability to do so.

But with a Homestead, (small though it might be) for himself and family, with a position in society, his independent and manly feelings would not be destroyed, the soul of hope would not be darkened; hence, he would go forth to labor cheerfully, with more energy, and with a far better prospect of success in retrieving his embarrassments; at least, to do what the laws of God and human society require him to do; to support, and give his offspring a moral and virtuous training. Let the Legislature then be actuated by experience and enlightened reason, and pass the law proposed, and it will have at once done much in the cause of humanity.

The writer imagines that he can, without any prophetic aid, penetrate the veil of a few coming years, and see the lowly and frugal cottager's little children, yet unborn, smiling their cheerful smiles, and lisping with praise the names of those who afforded them, by the timely law, their little humble, though happy home, and needful boon, the very means which would afford them food and clothes, the absolute wants of life. But here, perhaps, the proud unfeeling nabob will smile the contemptuous smile; but let him remember that none are so

high, but they may be brought low; let him remember that there is One higher than he, who feeds the young ravens when they cry; and let him remember also, that there are thousands and millions of the human race, who, by a wrong system of legislation—aye, by the very system that made him nabob, are deprived of even the absolute necessaries of existence.

Only think of that system of legislation which subjects one portion of the community to the misery of destitution, merely to pamper and aggrandize another. It is so, and yet grave legislators close their eyes upon it!

Well, the time has come when such evils may be arrested. Then let it be done before these evils become so deeply rooted that they can be torn up or destroyed only by a disastrous convulsion. Let it be done now. If the Legislature will not act, and that quickly, let the *fiat* of the people come up in thunder tones until they do act. Several of the old States have set us a noble example on this subject.

We have recently seen the great State of New York enact a law exempting the Homestead of every family of two or more persons from execution or sale for any debt or obligation contracted after the passage of the law, where the homestead does not exceed \$1,000 in value. Besides this, the laws of New York make an exemption of a necessary amount of personal property.

The law of Georgia on this subject, enacted in 1841, is still more liberal. It exempts from execution founded on contracts, in favor of families, real estate not to exceed in value \$1,200, and also a considerable amount of personal property.

The law of Connecticut, enacted at the last session of the Legislature of that State, exempts the Homestead when it does not exceed in value \$300 and the necessary articles of personal property to meet the real wants of families.

The statute of Alabama, enacted in 1832, is also very liberal on this subject. It exempts from "all legal" proc-

ess an amount of personal property, reaching about \$1,000 in value, and besides this, *all books*.

The exemption in favor of all books is certainly a wise policy.

I believe the constitution of Wisconsin exempts in like manner, 40 acres of land without regard to value.

The statute of Michigan, enacted in 1839, exempts from execution *books* exceeding in value all the amount of property exempted by the laws of this State.

Several other of the States, I believe, have similar laws on this subject; but further comment seems useless; however, it may be added that even in England the debtor, if he be a trader, is allowed from £300 to £600 for his future maintenance, to put him in a way of honest industry.

The writer might add much more, but this communication has already swelled beyond his original design—his object being merely to call the attention of the legislature to this subject, where it is hoped, it will find more able advocates than himself.

It remains to be seen what policy the legislature will adopt on this subject. If it does not move on this subject, sooner or later, the people certainly will.

In the estimation of the writer, this measure is of more pressing importance than any that the Legislature could act upon.

Why not enact such a law as is proposed? It would do more to feed the hungry and clothe the naked and the poor, to prevent destitution and pauperism, vice and crime, than all the alms, than all the charities ever bestowed, simply by allowing the unfortunate to have and hold the means necessary to feed and clothe themselves. Surely the time has come for action.

FENCES A DIRECT TAX TO THE FARMER.

[New York American Agriculturist, 7:87; Mar., 1848]

[January 15, 1848]

In reading Mr. Bacon's¹ article on this subject in the August (1847) number of the Agriculturist, there was one sentence, in particular, which I thought ought to be printed in large type and stuck up at every rod of fence in the country. It is this: "There must, indeed, be a horrid lethargy pervading the mind of the body agricultural while they go calmly, and indifferently, and drudgingly on, and voluntarily submit to an evil for whose existence there is no pretext or excuse."

Farmers! turn back to page 252 and read this article of Mr. Bacon's again. Think of that township of land, only four miles square, that requires one hundred miles of road-side fence! Recollect that this is not an extraordinary case. The whole of the great tract of country in the north part of Ohio, known as the Western Reserve, is laid off in squares almost as exact, though a little larger than the squares of right-angled Philadelphia. And in Michigan, and perhaps some others of the western states, every section line is a public highway by law. This gives seventy-two miles of road, and one hundred and fortyfour miles of road-side fence, for every congressional township of land, six miles square; besides the occasional "cross roads," and those which do not follow section lines. To fence the roads of such a township with an ordinary rail fence will require four hundred and sixty thousand, eight hundred rails; all of which must be renewed every few years. Count these rails at only one cent each, and the cost is \$4,608, which at six per cent. interest, is \$276.48; while the annual decay and cost of repairs, is at least, as much more, making an annual tax of over \$500

'William Bacon, of Richmond, Massachusetts. Correspondent of the American Agriculturist, 1846-1848, and the Cultivator, 1845-1852. Wrote interesting articles on trees and "Potato Rot." His article, "Fences a Direct Tax to the Farmer," appeared in the American Agriculturist, 6:252-53.

for road-side fences in each township. And all for what? I beg of every reader to repeat the question. And this view of the case is not exaggerated. In many other states, the cost of fencing materials is more than four times as much, and roads equally plenty, to say nothing of division fences through the farms and between neighbors, the great cause of half of the neighborhood quarrels and vexatious law suits, besides the enormous amount of cursing bad fences and breachy cattle.

And yet men "voluntarily submit to an evil," the cost of which is beyond calculation. If every man were directly taxed for the cost of the Mexican war, we should have an outcry louder than the din of battle; and yet that tax would not amount to a tithe of the enormous annual fence tax of the United States.

"Farmers, think of it!" Reason upon the subject. Do not scoff at it as the vagaries of "the crazy advocates of the non-fencing system." If I rightly understand the creed of all those who advocate this system, it is this: That every man take care of his own animals—and not compel his neighbor who keeps none, to build miles of costly fence to guard his crops from the depredations of his neighbors' cattle and hogs, which he turns out to roam at large without a keeper, or care where they forage their feed.

I cannot better conclude this article, than by quoting the closing paragraph of Mr. Bacon's, and at the same time assure him that "I go the whole hog," as we say out here, against the worse than foolish fencing system. "Oh! when will the agricultural public be sufficiently awake to their interest, comfort, and those of the travelling public, to remove these appendages from their premises, [the road side], and rid themselves of a grievous burden?" Echo answers, "Oh! when." SOLON ROBINSON.

Lake Court House, Crown Point, Ia., January 15th, 1848. CHOICE OF TREES AND SHRUBS FOR CITIES AND RURAL TOWNS.

[New York American Agriculturist, 7:114; Apr., 1848] [February 15, 1848]

I was highly interested with the articles upon this subject, which appeared in your last volume; and the beautiful illustrations accompanying them, conveyed more information to my mind than ten times the same amount of letter print. The present style of illustrating descriptions by pictures, is one of the great and good improvements of this improving age. But I beg this writer to bear in mind that in many of the rural towns of America, I might say nearly all of them, the building lots are laid out upon such a pinch-gut principle, there is so little room to spare, that fruit trees should always be looked to first. In fact, we often see some useless shade tree occupying a space that might have been occupied by an apple tree that would have furnished not only the luxury of good fruit, but the same amount of shade; and according to my notions of utility, more ornamental than that "great, strong, ugly thing, the Lombardy poplar," which affords neither food nor good fuel, and dead or alive, has no utility. (a) I cannot therefore, join in the recommendation of this tree, while our native forests afford so many others of equal beauty of form, and far more cleanly in their habits. If a tall spire-like tree is required to break the monotony of the line, there is the larch, the fir, or even the white birch, all better trees than that filthy worm breeder. the Lombardy poplar.  $(b)^2$ 

<sup>&</sup>lt;sup>1</sup> See American Agriculturist, 6:215, 247, 272, 303, 335.

<sup>&</sup>lt;sup>2</sup> The editor's comments follow: "(a) Our correspondent probably is not aware of the fact that this tree, in some parts of the country, is headed down to the lowermost limbs; and that a crop of excellent oven wood is obtained from the young shoots, which are cut and made into faggots in the spring of every second or third year. The timber of the trunk, too, when sufficiently large and sound, has been wrought into articles of household furniture of most exquisite

One of the most unaccountable tastes in the world to me, is that of the man (and I have seen a thousand such). who can content himself to settle down in the middle of a western prairie, without a single tree or shrub, either fruiting or ornamental, around his dwelling, and sometimes hardly in sight. Such men may be honest, but they certainly lack refinement, and lose one of the enjoyments of life.

In reading the writer's description of the occidental plane (button wood or sycamore), reminded me of a remarkable instance of the rapid growth of that tree. Mr. Nathan Lord, who lived to near the age of ninety, on the banks of the Shetucket River, in the town of Franklin, Ct., when he was first married, carried four young trees of button wood, six miles, on horseback, and set them out near his house. While the planter of these trees was still a hale old man (I think 84 years old), one of them was uprooted in a gale, and he assisted to saw off five twelvefoot mill logs, clear of limbs, the butt of the largest of which was more than four feet in diameter, while the top cut was but a trifle smaller, though I cannot remember the exact size, or amount of lumber sawed from the tree.

Few, now, who see the banks of this river lined with this kind of tree for miles, are aware that all those venerable looking old button woods sprung from the four little sprouts transplanted by good old Deacon Lord, less than one hundred years ago. SOLON ROBINSON.

Lake Court House, Crown Point, Ia., \ February, 15th, 1848.

beauty, surpassed by few, if any, of those made from our native woods.

"(b) It might be questioned whether the larch, the white birch, or the fir, would serve for contrasting with masses of roundheaded trees, of great height; as these trees, when they arrive at their full growth, in a great measure, lose the spiral shape of their tops, and consequently cannot mend the defect in the landscape, which the full-grown Lombardy poplar invariably supplies, whatever may be its age or size."

#### CHEESE MAKING.

[New York American Agriculturist, 7:211; July, 1848]

[March, 1848]

I HAVE heard a great deal about the value of prairie grass for butter and cheese. And yet I heard a Hamburgh friend of mine say, a few days ago, that he had engaged to send all his cheese this season to Chicago, at a pretty round price. Why is this? If the grass is really good for anything, in that region, why is it that cheese is not made there by the million? Surely it is not an art very hard to learn. If the pages of the American Agriculturist alone were carefully examined, I think that directions enough might be found to enable any person to make a good cheese. In fact the valuable information given in this publication, at p. 233, vol. vi. might alone be sufficient, and worth ten times the cost of the whole set of this paper.

How cheap knowledge is offered to the million now-adays. And in no department of rural economy is the need of increased knowledge more apparent than in cheese making.

SOLON ROBINSON.

Crown Point, Lake C. H., Ia., March, 1848.

#### EXPERIMENTS AMONG FARMERS.

[New York American Agriculturist, 7:282; Sep., 18481]

[July, 1848]

ALL those who lend their assistance in filling the columns of your journal are directing their best energies to promote the great experiment now being tried among farmers, whether an increased taste for reading agricultural works (that is, what ignorance denounces as "book farming"), will produce an improved condition in the cultivation of the soil, and as a natural sequence, an improved condition of the minds of the cultivators that will

<sup>&</sup>lt;sup>1</sup>Reprinted in the Raleigh North Carolina Farmer, 4:89 (September, 1848).

promote and increase the refinement, necessary to promote the happiness of the human family.

For my own part, I am so far satisfied with the result, that I fully believe we are doing good. We are trying a great "experiment in feeding." Feeding the intellect of a much-neglected mass; and we ought to be careful that we do not surfeit it with indigestible food. On this account, I was much taken with Mr. McKinstry's article in the August, 1847, number of the Agriculturist, upon the necessity of experimenters being very careful in making experiments, and still more careful when they publish an account of them.

Nothing but the clearest and most comprehensible result and plain benefit to the man himself, will ever induce one who has all his life long carried a stone in one end of the bag, to balance the bushel of corn in the other, to adopt the improved system of discarding the stone, and dividing the corn into equal parts.

SOLON.

Crown Point, Ia., July, 1848.

# VENTILATION ESSENTIAL TO HEALTH.

[New York American Agriculturist, 7:335; Nov., 18482]

[September, 1848]

THE bad state of the atmosphere of stove-heated rooms cannot be cured by any amount of steaming water. Ventilation is what is wanted, and what is always found wanting, and what renders the atmosphere of our churches and other public rooms so often so unfit for human respiration.

Rooms should not be "frequently ventilated," but always so. Every tight room should have a ventilator constructed in the ceiling, to answer the purpose of the good old-

<sup>1</sup> J. McKinstry, Greenport, Columbia County, New York. Correspondent of the *American Agriculturist*, 1847-1850, and the *Cultivator*, 1849. Wrote an interesting series of articles on agricultural chemistry in the *American Agriculturist*, 1848-1849. Robinson refers to "Experiments among Farmers," in *ibid.*, 6:250-51.

Reprinted in part in Michigan Farmer, Detroit, 6:356 (Decem-

ber 1, 1848).

fashioned fire place, of keeping up a constant circulation of air.

Some one in your pages, I think, has said that "stoves were great savers of fuel, at the expense of human lives" —all of which is for the want of ventilation. It is a most serious fault in the construction of nine tenths of all the school houses that are heated by stoves, that there is no ventilation. I have no doubt but thousands of children in the United States are annually sent to a premature grave by diseases contracted, aye, created, in school rooms. If our wise men, who sometimes make very foolish laws, would enact that every school room should be so constructed as to remedy this evil, they would for once show the world they possessed some feelings of humanity at least. Daniel B. Thompson, of Montpelier, Vt., author of "Locke Amsden," is worthy to be remembered by every child in America, for the beautiful manner in which he has illustrated the subject of ventilating school houses.

SOLON ROBINSON.

Crown Point, Ia., Sept., 1848.

# ROBINSON TO WESTERN RANGER

[Valparaiso Western Ranger, November 17, 1848]

Winimac, Oct. 28, 1848.

Messrs. Editors: I notice in a late number of your paper, an article calculated to mislead the purchasers of Canal Lands, unless corrected. This article appears as

¹Daniel Pierce Thompson, born at Charlestown, Massachusetts, on October 1, 1795; died June 6, 1868. Moved to Vermont, 1800. Tutor in Virginia family, 1820. Clerk of Vermont legislature, 1830. Author of Gaut Gurley, Adventures of Timothy Peacock, and Mary Martin, 1835; The Green Mountain Boys, 1839; Locke Amsden, or The Schoolmaster, 1847; Lucy Hosmer, 1848; History of the Town of Montpelier, 1860. Judge of the probate court, Washington County, Vermont, 1837. Secretary of Vermont Historical Society, 1838; of State Education Society, 1846; of State of Vermont, 1853-1855. Flitcroft, John E., The Novelist of Vermont; A Biographical and Critical Study of Daniel Pierce Thompson, 303, 321-24 (Cambridge, Massachusetts, 1929).

editorial in your paper, though being published "by request." The "statement" or supposed narrative of facts leads me to suppose that it might have been *furnished* for publication by those who may have an *object* in misleading the public. I acquit *you*, in advance, of any such design, for our pleasant and agreeable acquaintance (to me) precludes all idea that you would misstate or misjudge any matter of public concern.

The article to which I allude presupposes that the Trustees are acting and design to act, in bad faith towards the purchasers of these lands, and that the reappraisement is to be set aside, and the lands be held at the *original* price, without reduction. This is not the fact. The trustees mean to carry out every requirement of the State Debt act in good faith, but they must be allowed time to do so, and to do it too in a manner both legal in reference to the law, and justly towards the creditors of the State and individual purchasers.—That act never contemplated a wholesale reduction, by which gross injustice might be done to individuals, but an appraisement of each parcel separately, which has not been done, so far as the Trustees are at present advised.

There seems to be but one question involved in this matter, and that is a question of time, which no settler on the State lands should permit himself to misjudge. The operations of the Trust are numerous, and it would be strange, indeed, if some delay was not unavoidable in managing property which the State has passed off to her creditors for one-half her entire debt, or upwards of seven millions of dollars. "The world was not made in a day" is an old saying, nor can the confusion and mismanagement of the Canal and Canal lands be brought out of chaos in a single year.—Much has already been accomplished, and the next few months will be sufficient to satisfy every purchasor of these lands that the Trustees will do them ample justice.

I would say to the holders of Canal certificates that speculators should not induce them (by raising the hue

and cry of threatened ruin) to part with their property.

—It is an old game, and has been successfully played off before to-day. Let no man be deceived by this mad dog shout; but let all bona fide purchasers—all cultivators of the land—all who intend to cultivate them—be assured that the law will be faithfully carried out in all its legal and rightful bearings.

I am apprised that there are a few persons who have assumed to speak for the purchasers of those lands, (and you are not of the number) and who have taken upon their shoulders the made-up weight of this affair; but they are not the real friends of those they profess to serve. Many of them, I fear, are land speculators, or the convenient instruments of others engaged in that line of business, who will "take the Lion's share," and leave the balance for the hard working cultivators of the soil. These men are understood in some places, and will be universally known before many months.—A hint here is sufficient.

You are mistaken in saying that the Indiana Journal only contained the advertisement. It has also appeared in the Indiana Sentinel, and in the papers at Wabashtown, and perhaps at Logansport — The advertisement should have appeared in the paper most convenient to the lands, and this neglect will doubtless be remedied in future.

This is all that I feel called upon to say, and it is said upon the individual responsibility of

A CITIZEN OF INDIANA.

AGRICULTURAL TOUR SOUTH AND WEST.

No. 1.

[New York American Agriculturist, 8:18-20; Jan., 1849]

[November 14, 1848]

To the Readers of the American Agriculturist:—I am again out upon a tour of observation, directing my steps towards a clime more congenial to my health, than is that

of my northern residence. And I propose to note down such things by the way, as will be most likely to be interesting and useful to you.<sup>1</sup>

Being charged by friend Allen to "write short, practical articles," I shall be precluded from giving as much of the descriptive character of the land I shall travel over. as I would like to, and as I believe would be pleasing to you. I shall, therefore, make an abrupt commencement with a little account of my visit at Terre Haute—an old French name that means high land. It is situated on a most beautiful prairie, some five miles wide and fifteen long, that lies high above all floods, along the bank of the Wabash, which is only navigable in high water; and the place being 120 miles from the Ohio, it suffers the evil of being an inland town. The canal to Lake Erie will, however, open in the spring, and in a few years more, to the Ohio. The rapids of the Wabash are also being improved, and a railroad to Indianapolis, and thence to Bellfontaine, in Ohio, is now in progress.2

It is to be hoped when these channels are opened so as to carry off the surplus produce, that the great staple here, Indian corn, will be worth more than twelve to fifteen cents per bushel, the present price; and that the farmers will not wear quite so much the appearance of "hog and hominy," as many of them now do. Yet there are some here who take a pride in cultivating and beautifying the earth. Among these I must mention three of

¹Robinson made the trip as agent for the American Agriculturist, with the additional purpose of obtaining orders for the agricultural warehouse of A. B. Allen & Co., of New York, and Stephen Franklin, of New Orleans.

<sup>&</sup>lt;sup>2</sup> The Terre Haute and Richmond Railroad, later the Terre Haute and Indianapolis, and now a part of the Pennsylvania system, and the Indianapolis and Bellefontaine Railroad, now a part of the Big Four system, were chartered in 1847 and 1848 respectively. Esarey, History of Indiana, 2:720-24. See also Murphy, Ared Maurice, "The Big Four Railroad in Indiana," in Indiana Magazine of History, 21:111 ff.

nature's noblemen, James Farrington, S. B. Gookins, and Wm. F. Krumbhaar.

Mr. F. has a most beautiful place just on the south edge of the town, and one of the best houses I am acquainted with. Best, because so well built, and so exceedingly neat, and plainly finished. I need only say that there is a wife and daughter within, who are "all right," to satisfy my readers that it is the dwelling place of such comfort and happiness as I wish every cultivator of the American soil could enjoy.

Mr. F. and his partners have one of the most convenient pork-slaughtering and packing establishments I have ever visited. If I could take up the room necessary to describe it, I doubt not it would be interesting. The head, feet, bones, and entrails are all strained to save every ounce of fat. The offal of the strainer and blood, although such good manure, is never saved. The hair, during the first year or two has been sold to go east, for about seven cents a hog. One curious circumstance occurred last spring in connection with this. The hair had been spread out to bleach on a piece of common grass. After its removal, in the spring, the grass started very fresh, and cows fed upon it, and took up so much of the scattered

<sup>1</sup> James Farrington, born at Boston, Massachusetts, 1798. Moved to Vincennes in 1819, and in 1822, to Terre Haute. Lawyer and orator of note. In Indiana Assembly for five sessions. Connected with Terre Haute Branch of State Bank of Indiana. Appointed assessor of Seventh United States Internal Revenue District by President Lincoln, 1862. Beckwith, H. W., History of Vigo and Parke Counties . . . , pt. 2:96-97 (Chicago, 1880).

'Samuel Barnes Gookins, born at Rupert, Vermont, May 30, 1809; died at Terre Haute, June 14, 1880. Removed from Vermont to New York, 1812; to the West, 1823. Settled near Terre Haute. With John B. Dillon, purchased Vincennes Gazette, 1830. Edited Western Register, Terre Haute, 1831-1832. Admitted to bar, 1834. President judge, Seventh Judicial Circuit, 1850-1851; judge, Supreme Court of Indiana, 1854-1857. Practiced law in Chicago, 1858-1875. Contributed political articles to the press and to magazines. At the time of his death had just finished a history of Vigo County, which is incorporated in Beckwith's history. Ibid., pt. 2:75-78, 160-64.

hair, that several were killed by the hair balls formed in the stomach. Some were found to have two or three dozen balls in a stomach, and some were very large. It became necessary for the neighbors to have the ground plowed to save the lives of cattle running upon the common. It would have had a more happy result, if it had been the cause of forever preventing cattle from being free commoners of this beautiful town.

Mr. F.'s establishment is capable of killing and packing about 500 head of hogs a day; and there are four others in this place, besides two steam trying lard houses. Pork is now worth here about two and a half cents per lb. The great mass of hogs appear to belong to that breed which must "root, hog, or die," and are well able to do it. Even those that are fed corn, have it well mixed with mud—the fatting season, being the rainy season.

The best lot of hogs I saw about Terre Haute, I found on the farm of Mr. Krumbhaar. They were a mixture of Berkshire, Byfield, and Grazier varieties. And as marking a degree of civilization, he did not throw the corn in the mud. On my visit to Mr. F., I was accompanied by Judge Law,¹ of Vincennes, one of the pioneers of this valley. Had I room to give his reminiscences, as related during the two days spent with him, it would make an interesting paper.

We found on Mr. K.'s centre table, in the parlor, one of the most fitting displays of such a table, in a country gentleman's house. This was twenty eight varieties of apples. Mr. K. feels, as well he may, quite proud of his success in growing fine apples. In fact, though, this whole region is full of apples. Mr. Farrington has nearly as great a variety, besides a good assortment of pears and peaches, and other fruits.

At Mr. K.'s I ate chestnuts grown from the seed in

<sup>&</sup>lt;sup>1</sup>John Law, born in New London, Connecticut, 1796; came to Vincennes in 1817. Lawyer, judge, author, Congressman. Published the Colonial History of Vincennes in 1858. See Dictionary of American Biography, 11:40-41.

about ten years. Chestnuts must never be allowed to get dry, to insure their growth.

Mr. K. and Mr. F. have a fine start of evergreens. They were taken up in the spring with but little dirt to the roots, and boated down the river sixty or seventy miles; and by such careless handling, more than half died. The soil around here is a sandy loam. The timber mostly oak, except in the river bottom. Mr. K. has some very good Durham cows, and although his wife was from a Louisiana plantation, she has become an excellent butter maker.

Mr. Gookins, although a lawyer, has a fine taste for cultivation. He is just beginning a place a mile south of town, where I found some of the handsomest three-year-old apple trees, that I ever saw. Although the ground is a very soft loam, he told me that he had large holes dug, and then fine, rotten manure mixed with the soil, and the hole half filled; and then with his own hands he carefully straightened all the roots of the young trees, and pressed the dirt around them, so that they seemed to feel no check in growth in their removal from the nursery. His prospect for a crop of apples next year, is now good. So much for care in setting out trees.

Mr. G. has tried planting corn and potatoes in alternate rows, and thinks it an excellent plan.

One of the most favorite apples hereabouts, is the belle fleur. They grow large, and of excellent flavor. They are unlike those of the east in one particular, as I never saw one here with loose, or rattling seeds. The gloria mundi has been grown here of twenty-six ounces weight. Apples throughout all the west, are most abundant this year. Hundreds, aye, thousands of bushels will lie and rot unheeded, here in the Wabash Valley. Many hundreds of wagon loads are hauled near two hundred miles to Chicago. If nice, they will sell well, but common ones are no longer worth hauling.

<sup>1</sup>The family of Jane McCutcheon and her marriage to William Frege Krumbhaar are mentioned in Arthur, Stanley C., and Kernion, George Campbell Huchet de, *Old Families of Louisiana*, 354 (New Orleans, 1931).

Mr. Gookins told me of an orchard which was set eight years ago, in the ordinary, careless way, that is not now near so good bearing as his.

In 1818, Terre Haute was laid out a few miles from the "frontier post," Fort Harrison.¹ All of northern Indiana, Illinois, and Iowa and Wisconsan, was then a vast, untrodden wilderness. Look at it now. See what a change in thirty years. A region larger, and far richer than some European empires, full of civilized life; and although not one tenth cultivated, talking about furnishing the world with human food.

Nothing is now so much wanted as facilities of transportation. No eastern reader, not even around Buffalo, can form an idea what wretched bad roads the dwellers upon this rich soil have to travel over, such a time as this fall, for instance, has been. It is worth more than produce brings, to haul it fifty miles to market. And every effort to make good roads out of the soil alone, has proved an entire failure. The national road is an example in point. For, after an expenditure of more than \$30,000 a mile, the road is now what a decent Yankee grand jury would indict as *impassable*.<sup>2</sup>

There is a new bridge over the Wabash, and a very muddy road west, though not near so bad as the one I came over from Indianapolis. The part of Illinois lying

<sup>1</sup> Terre Haute was laid out in 1816. Markle, A. R., "The Terre Haute Company," in *Indiana Magazine of History*, 12:158-60.

<sup>2</sup> In 1806 demand for better communication with the West caused Congress to pass an act providing for the construction of a toll-free National Road from the headwaters of the Potomac to the Ohio River. Later it was proposed to extend the road to St. Louis. The first section, from Cumberland to Wheeling, was not completed until 1818. Gradually the work was carried on to Indianapolis. Because of the rapid development of railroads, appropriations ceased in 1848 after an expenditure of nearly seven million dollars of federal funds. The road was only partially finished west of Indianapolis, and grading ceased near Vandalia, Illinois. See Esarey, History of Indiana, 1:290-91, for a description of the road in Indiana. The Plough, the Loom, and the Anvil stated in 1851 that "The Conestoga wagon-horses of Pennsylvania travel on the National Road from fourteen to sixteen miles a day."

along the national road, between the Wabash and Kaskaskia River, at Vandalia, is, perhaps, the poorest of any part of the state. At any rate, the people and cultivation bear no comparison with the northern counties. Not but what there is sufficient fertility in the soil, although the prairie land is very flat, and apparently wet and cold; but there is no show of "go-ahead-ative-ness." There is not a good-looking, well-cultivated farm in the whole hundred miles. And I saw nothing that looked like a good school house. But I did see a great many whiskey shops. I am sorry to write against any country, but this is a region that I would not settle in myself, if in search of a new home. Others may if they like it.

Vandalia, once the capital of the state, now wears the gloomy weeds of the "deserted village." The Kaskaskia, which runs at the foot of the hill on which the town is crumbling to decay, is the only permanent mill stream I have seen since I left the Wabash. Out of this in flood time, go flat boats, 300 miles by water to the Mississippi, and this is the only way of getting off produce that will not bear hauling sixty odd miles to St. Louis.

The country between Vandalia and St. Louis, is far better than that eastward. Yet here is a great want of improvement. In Bond and Madison counties, there are some good orchards, and a few good-looking farms. But the traveller is surprised to see within twenty or thirty miles of St. Louis, vast tracts of rich, rolling, healthy prairie, lying uncultivated, and even unbought of government. Even the far-famed American bottom, opposite St. Louis, is not one half of it in the very rough state of improvement that the other half is.

There is a very great want of water mills in all this part of the state. Page's patent circular saw mills, are getting considerably into use, and are much approved. Most of the grain for family use is ground with horse mills. I saw two windmills, and was told that they did pretty well.

In the interior counties of the state, very little wheat

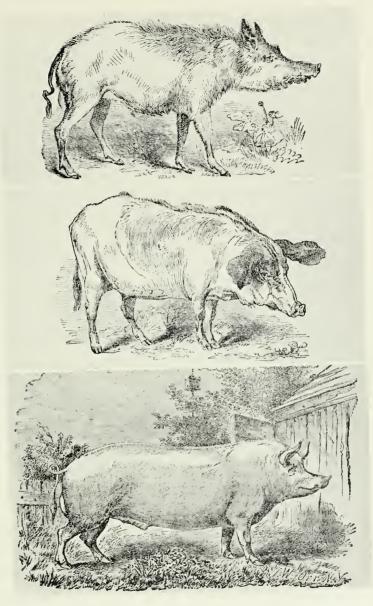
is grown; as the inhabitants mostly use corn, and wheat will hardly pay transportation. If it were not for the fact that farmers who haul produce to market, live in the cheapest manner on the road, their loads would often be insufficient to pay expenses. What would a New-England farmer think of hauling produce 200 miles to market; and during the whole trip sleep in his wagon and eat his cheerless meals by his camp fire, along the roadside? Such is the condition of things in portions of the great west.

Although this is not the case upon the fertile lands opposite St. Louis, yet there are times when to get a load of wheat only a dozen miles along what the inhabitants are pleased to call "the big road," would be such an undertaking as no load of wheat would be sufficient to pay me for. I don't know as the American bottom ever becomes absolutely impassable; but if it does not, it is because that no state of roads can prevent western people from passing them. It is probably impossible for any eastern man to conceive anything half so bad.

In my journey across the state of Illinois, I did not see a herd of good cattle, notwithstanding it is such an excellent grazing region. The cattle are all of the scrub breed, and small at that. On the Kaskaskia, the milk sickness¹ prevails. It is a curious fact that beeves affected by this complaint, cannot be driven to market. I saw some upon the road that had given out. Cattle slightly affected often recover. Care should be taken to keep them from salt, as that aggravates and often kills.

It is a common practice to run a beeve, before butchering, to prove it free from this disease, as fatal effects follow from eating beef badly affected with this strange poison, as well as eating milk or butter from cows so affected.

¹Milk sickness (sometimes called "trembles") is a malignant fever which attacks man and some of the lower animals, such as unweaned calves and their mothers, horses and colts, sheep and goats. Cause is supposed to exist in poisonous herbs which are eaten by animals. Man is thought to be infected through cattle—meat, milk, cheese, or butter.



TYPES OF HOGS
[From One Hundred Years' Progress of the United States, pp. 61, 62 (Hartford, 1870)]



I saw very few sheep along the road, and all of them of the common kind, yet looking remarkably well. There is one difficulty in growing wool, in the great quantity of burrs and "stick tights;" but yet these are not insuperable, and it is wondrous that no wool of any account is grown in this part of the state for exportation. It is an article that will bear hauling.

Corn and hogs, hogs and corn, are the almost universal rotation. And yet in the whole distance (160 miles), I saw but one good lot—that is, of good, improved breeds. I saw droves going to St. Louis, for pork, nearly 100 miles distance, which as a matter of course could only be in good working order, averaging, perhaps, 175 lbs., and some of them showing tushes three or four inches long. Bah! What pork!

In that whole distance, I saw but one threshing machine. How curiously this contrasts with a trip through the northern counties, where a traveller will often see twenty in a single day's ride.

At St. Louis, I had intended to make some acquaintance with those who should feel an interest in agricultural improvements; but I soon found that I had fallen upon the wrong time.

I found the news of the presidential election that had taken place the day before, in New York, and other eastern states, a thousand miles away, here in every man's mouth, and so engrossing all attention, that it would be an idle waste of time to offer to talk upon any other subject. Ah, me! How can the minds of a people be brought to think upon the importance of judicious cultivation of the earth, who never think or read of any other subject than party politics? The manufacturer of plows, to them is a far less important person than the manufacturer of political opinion.

Speaking of plows. I saw at St. Louis, one of those great, unwieldy, iron, Scotch plows, just imported for the use of some prairie farmer, at a cost probably sufficient to have kept him in a neat, light article, suited to his

wants, a life time; while this, after proving its total unfitness for this soil, will go, as many others have done, to the smith's shop for old iron. \*\*\*\*\*\* An unwelcome shake of ague, here shakes off the balance of this article.

Solon Robinson.

On the Mississippi River, Nov. 14th, 1848.

## AGRICULTURAL TOUR SOUTH AND WEST. No. 2.

[New York American Agriculturist, 8:51-53; Feb., 1849<sup>1</sup>]

[November 22, 1848]

I THINK the close of my last letter left us at St. Louis. The importance of the trade of this western town may be imagined from a view of the quay. For nearly a mile, the shore is crowded with large steamboats, lying so thickly that only bows reach the shore. At this season, most of the New-Orleans boats go down with decks crowded with fat cattle, cows, calves, sheep, hogs, fowls, and horses, and with holds full of flour and grain, while every space on the decks and guards, is piled up with bags of corn, oats, and wheat.

The freight of cattle from St. Louis to New Orleans is \$6 a head. Among the hundreds that I saw shipped for beef, I did not see one that would have sold for that purpose at one fourth the usual price, in the New-York market, except, perhaps, some young steers. The sheep were better; some of them really good mutton, though all of them of a small size. I do not think I saw any that would exceed twenty pounds to the quarter; generally not fifteen pounds.

From St. Louis to Vicksburg, my place of debarkation, there is but very little to interest the traveller. The weather was gloomy, and a great portion of the shores of the Mississippi River are still in a wilderness condition, or in a most primitive state of cultivation. Between St.

<sup>&</sup>lt;sup>1</sup> Reprinted in Southern Cultivator, Augusta, Georgia, 7:59 ff. (April, 1849).

Louis and the mouth of the Ohio River, there are miles of rocky shore, towering in beatling cliffs high in the air, and in places almost perpendicular from the shore. But below the mouth of that river, no rocks nor high lands are seen, except in four or five places down to the gulf. Memphis, Vicksburg, and Natchez are the most prominent of these points. It is in consequence of this liability to overflow, that we see but few villages on the banks of the river, and nearly all the residences are very primitive-looking log cabins, with farms to match. Most of the settlements were made for the purpose of cutting wood for steamboats: the price of which is from \$1.50 to \$2.25 a cord; and is mostly cotton wood. The price of chopping, splitting, and cording, from fifty to seventy-five cents. Owing to the vast number of snags, few boats venture to run nights, except in bright moonlight.

On the 15th of November, below Memphis, the green foliage began to tell that we were rapidly getting into a warmer latitude. One of my travelling acquaintances of this passage was an intelligent gentleman of the name of Weston, who had spent two years in the Rocky Mountains and New Mexico, for his health. He passed seven months with a "mountain man," who took a lot of tame goats, so trained as to follow the mules, into the mountains, for the purpose of catching lambs of the Rocky-Mountain sheep. He succeeded in catching quite a number, which he reared with his goats; carrying them while small, in hampers on mule's backs. His design was to bring them into the United States; but Mr. Weston subsequently learned that all of them died before they came to maturity.

These animals, though called sheep, are very unlike our domestic animals of that name. They have horns which give them the name of "big horns," and they are covered with long hair instead of wool. Though Mr. W. tells me, that in winter, they have a thick coat of fur, something like the Cashmere goat, which he thinks would be valuable. The meat is very delicious. Mr. W. speaks of the New-Mexican sheep as a very inferior kind. There is, also,

a mongrel race, of hybrids, between sheep and goats (?), which are a worthless race. Nearly all the New-Mexican sheep have horns, and some of the rams, as many as five, sometimes three feet long.

He thinks not more than one tenth of New Mexico is cultivatable, and none of it without irrigation. Some of the isolated valleys of the Rocky Mountains, he speaks of as delightful places for the dwelling of civilization. The most extensive, by far, is that of the Great Salt Lake, which is sufficient to form a small state within itself. It is in the north part of this valley, that the Mormons are now settling. From two of them on the boat, I learned many facts in relation to that settlement; but I must not occupy space to repeat it. Though I doubt not the account of the trip of one of them, who went with General Kearney, to California, and returned through Oregon and the Salt Lake Valley, would be highly interesting to the readers of the Agriculturist.

On the boat, I made the acquaintance of Dr. W. J. Polk,<sup>2</sup> a relative of the president, who related to me an anecdote of a planter on the Arkansas, that is so practical, that I will repeat it. It is his manner of punishing negroes, and he finds it more effectual than the whip.

Every Sunday, he gives an excellent dinner in a large room provided for that purpose, where he requires every negro to attend, neatly washed, and dressed, and after listening to a sermon, or the reading of some good discourse, all are seated at table, except those who are on the "punishment list;" and these are obliged to wait on the others, and see them feast, without tasting a mouth-

¹ Colonel Stephen Watts Kearny was placed in command of the Army of the West in May, 1846, and made a brigadier general in June. His expedition into California took place during the winter of 1846-1847. See sketch in *Dictionary of American Biography*, 10:272-74.

\*Dr. William Junius Polk, son of Colonel William Polk of Tennessee, who owned an estate of one hundred thousand acres in that state. American Biography, A New Cyclopedia, 8:315-16 (American Historical Society, 1920). See also, post, 186-88.

ful themselves. I would commend this course to others of my southern friends.

I landed at Vicksburg, November 17th, and found as fine a lot of mud in the streets of that hill-side town, as one could wish for. I spent the night with my hospitable friend, Daniel Swett, and in the morning saw a show of Mississippi ice. Mr. Swett has been for several years engaged in the introduction of improved agricultural implements, into this part of the country, without hitherto meeting with much success. One difficulty, hitherto experienced with eastern plows, is found in the low beams.  $(a)^2$ 

Nov. 18th.—I rode out to the plantation of Dr. M. W. Philips, whose name has long been known to the readers of the Agriculturist. He lives some 15 miles east of Vicksburg. The intervening land. (Warren county), being the most uneven surface that I ever saw cultivated. It may be said that there are no hills; but the whole face of the country is sunken into hollows, from one to one hundred feet deep, just as thick as they can lie side by side of one another. The soil is a light alluvion, without grit, and very deep. It is very liable to gully, and yet the perpendicular cut banks of the railroad, are standing with the ten-year-old spade marks still as plain as when first made. Many a hill side in this county is cultivated by the hoe, where it is so steep that a mule cannot pull a plow. It used to be celebrated as one of the best cotton-growing counties in the state; but a continued cropping of the land.

<sup>&</sup>lt;sup>1</sup> Possibly Daniel Swalt, an implement dealer of Vicksburg.

<sup>&</sup>lt;sup>2</sup> The editor described the measures taken to meet this difficulty: "(a) One of the editors of this paper, R. L. Allen, has travelled extensively through the south within the last two years; and having detected this radical deficiency noticed by our correspondent, immediately ordered high beams for several sizes of plows, including an entire series from the lightest cotton at \$1.75, to the heaviest sugar plow. These are made both by A. B. Allen & Co., of New York, and by Ruggles, Nourse and Mason, of Worcester. We venture to say, that, including the beautiful self-sharpening and sugar plows, lately got up by the latter firm, and the cheap, yet well-made and efficient cotton, corn, and sward plows, made by the former, there has never been a set of plows constructed, combining so much economy and advantage."

without manure, or even returning the cotton seed as manure to the soil, has so worn out much of the land, that it hardly pays for cultivating.

Doctor Philips (by birth a South Carolinian), though educated as a physician, does not practice. He is one of that small class in the south, sneeringly called "book farmers." He has about 300 acres of land under fence, of which 200 acres are cultivated. Much of this still bears the deadened forest trees, showing its late reclamation from the wilderness. He works ten field hands, and makes 80 to 90 bales of cotton a year, together with all his corn and meat. He has a small flock of sheep, from which he gets his negro clothing; he has also a large herd of cattle. Of course he eats "home-made butter," and of an excellent quality it is, too. His cattle are the best in the vicinity. His large stock of hogs is a mixture of Berkshire and grazier, about fifty of which are now fatting in the corn field upon waste corn and peas. These will weigh from 150 to 250 lbs. He has this year 90 odd acres of cotton; 80 acres of corn, and 15 of oats. By the by, he is now sowing oats. These will afford winter pasturage and make a crop ready to harvest the middle of June. These oats are sown upon cotton ground of the present season.

None of my eastern readers can imagine the troubles of plowing down cotton stalks. They are about as big as thrifty peach trees a year old, and almost as strong. [We have seen a cotton stock at least three inches in diameter, as hard, and having the appearance of wood.] Add to this, as is sometimes the case, a good coat of crab grass, thrifty stalks of which I have measured four feet long, and plow makers may see why high beams are required to their plows.

Dr. P. planted this season a quantity of eastern corn an eight-rowed, white-flint variety, in rows three feet apart, and hills with two stalks one foot apart, which grew to perfection; but was attacked with "the rot" after it had got ripe, and nearly all went to decay in the field. His other crop of corn, planted late and owing to much wet weather, became very grassy, he estimates at about 35 bushels to the acre. The cotton crop of this vicinity was much shortened by early frosts.

A medium crop of cotton is 1,000 lbs. of seed cotton per acre. This will produce 290 to 300 lbs. of ginned cotton, and about 30 bushels of seed, weighing about 22 lbs. a bushel. If 100 bushels of cotton seed per acre is used as manure, it will increase the crop about one fifth. About a quart of cotton seed to a hill of corn, scattered around the hill of young corn, it is thought will increase the crop about one fourth. Yet vast quantities of this valuable article are wasted. Perhaps it would be useful information to some of your readers to learn that cotton seed is about the size, and has somewhat the appearance, when free entirely from the lint, of large sunflower seed, and is equally oleaginous.

Dr. P. having a rather extra quality of Petit Gulf and sugar-loaf variety of seed, is putting up some hundred bushels for sale. He is sending a large quantity to South Carolina, and realizes a dollar a bushel, exclusive of pay for sacks.

There is a new kind of seed in this neighborhood called the "Hogan seed," selling for \$10 a bushel. Last year, it was sold at \$1,000 per bushel, or a dime a seed! It is said to be a very large and productive variety, though not anything like so large as the mastodon, which, frequently in rich land, grows 8 or 10 feet high, with corresponding-sized branches.

Dr. P. is quite an amateur orchardist. He has about 40 acres set with trees, among which, he has 70 kinds of apples, some of which are now coming into bearing. And 140 pears,—150 named varieties of peaches, besides a host of unnamed—26 kinds of plums, 13 apricots, 5 or 6 of figs, and several nectarines. Early harvest apples ripen here the last of June. Early York and rareripe peaches ripen about June 20th. Snow peaches, July 1st, and some of them eight and a half inches round. Early Tilletson, ripen about 30th June, and are a very rich

peach. Figs ripen here July 1st. Strawberries, April 10th, and continue about six weeks. Peaches bloom about the middle of February, and quinces the middle of March.

I have never seen a more thrifty-looking orchard than the doctor's. But few of the trees are yet in bearing. Mr. S. Montgomery, his brother-in-law, who also has a good orchard, is of opinion that summer apples will do well here; but has great doubts about success with winter varieties. At his place, we were treated with some very fine apples, just plucked from the trees. Certainly, if my wishes for success in raising fruit could insure it, such gentlemen as these would meet with a great share of it. I noticed on Mr. M.'s table, a well read copy of Browne's Trees of America, and a full set of the bound volumes of the Agriculturist.

Mr. William Montgomery<sup>2</sup> (the father) has spent a deal of money in a fruitless attempt to dam one of these soft-bank streams to drive a sawmill. Failing in this, he would now gladly avail himself of one of Page's patent circular saw mills, but is afraid to order one for fear it should prove a "Yankee humbug." A thousand other men in the south are in the same condition of this gentleman. They are greatly in want of just such a machine for sawing boards, but are afraid to purchase. So far as my word will go, I wish to assure them that these sawmills are just the thing wanted in a country where they cannot have water mills, and where all kinds of sawed lumber is, as it is here, very scarce and dear. Upon every plantation, there is already a horse power to which the sawmill might be attached at the gin house.

It is the fear of "buying a pig in a poke," that prevents a great many of these southern gentlemen from buying

<sup>1</sup>S. W. Montgomery, planter, Aurora Hill, Hinds County, Mississippi. Contributed an article, "Select Varieties of Peaches," to the *Southern Cultivator*, 7:157-58 (October, 1849).

<sup>2</sup> William Montgomery emigrated from South Carolina and settled in Hinds County, Mississippi, in the early thirties. Riley (ed.), "Diary of a Mississippi Planter," in *Publications of the Mississippi Historical Society*, 10:305.

improved implements and machinery that would be of vast benefit to them. Many of them continue to use plows that would now be a great curiosity among eastern plowmen. Dr. Philips has done much toward getting improved plows introduced among cotton growers. His system of cultivation, too, shows his neighbors whose land is wearing out, while his is improving, that such a soil as this judiciously managed should never wear out.

It is a truth that his crop of cow peas which he has often written about in the pages of the Agriculturist, appear to me sufficient to give the land a good coat of manure. The bulk of this crop must be beyond belief, to those who have never seen the like. My next letter I hope will be from the sugar plantations of Louisiana, provided it ever stops raining, so that I can get there.

SOLON ROBINSON.

"Log Hall," Hinds Co., Miss., November 22d, 1848.

THE PUMPKIN DANCE AND MOONLIGHT RACE.

One of the Western Border Tales.

By Solon Robinson, Esq.

[Daily Cincinnati Gazette, December 2, 1848]

[November ?, 1848]

In traveling through this queer world of ours, one not only meets with strange bed-fellows—(vide, the account of a certain Illinois Judge, making his first electioneering tour)—but strange fellows meet us, who apparently never go to bed.

I met with a lot of these the other day—or rather night—in a certain town, in the southers part of Illinois, and as it can positively have no bearing upon the election now, perhaps you would like to have it to use for "chinking" in among the election returns.

I don't know how it is, exactly, whether it is in consequence of the sovereigns of southern Illinois drinking so much whisky, that General Cass gets so many votes in

that district, or whether so much whisky is drank there in consequence of so many Cass men being there. But certain it is, that if the General had to pay for all that has been drank in his name, he would need another "extra allowance"—not of the "critter," his friends take that—but something extra to foot the bill.

I slept in a certain town, in that region, a short time ago, where the extras were indulged in most freely.

"The Grocery"—consisting of a whisky barrel, six tin cups, two green glass tumblers, a lot of pipes and tobacco—was in close proximity to the inn I was in, and there the qualities of a very recent extraction of the corn, and the fitness of the candidate to receive the votes of the corned, was discussed in the manner usual in such times and places.

From the run of the conversation, I was led to believe, that one who knew a thing or two, had lately been to St. Louis, where he had learned that Gen. Jackson was actually dead, and that it was not 'a darned Whig lie;' and that General Cass was a colt out of the same old war horse, and they were a going to run him any how, and he was jis' naterally bound to be the next President, any way it could be fix'd; and he wanted all that could, to stand up to the rack, fodder or no fodder.

But it also seemed that there were a few Mexican soldiers, who, although they believed that Gen. Jackson created the greater part of this world, also believed that old Zack Rough and Ready was now the only living personification of human perfection, and they'd vote for him right straight, from the word go; and no Cass man in them diggins could out run, out drink, out fight, out bet, or out argue them on that pint, by a long shot.

All of which remedies were apparently tried, and found ineffectual, in the course of the evening.

Finally, it was proposed, about midnight, to dance it out. The two parties then selected their champions, the fiddler mounted the whisky barrel, a large pumpkin was placed in the middle of the floor, and at it they went, with

coats off, like going to a hard day's work. Each one was to give the pumpkin a kick and a roll, and the other was to mount it, dance on and over it, without tumbling, or own himself and his Presidential candidate defeated, the lookers on, rolling in and keeping up a supply in the pumpkin market, as they became demolished by an occasional caving in of the article.

After about an hour's effort, it was a drawn battle; the two Generals having been floored about an equal number of times, in consequence of trying to make footing upon a very rolling foundation—a sort of pumpkin proviso.

At this juncture, the corn was getting decidely low: two of the tin cups had been flattened in the fall of Gen. Cass, and one of the green glass tumblers having come in between old Zack and the floor, at a time when the pumpkin went the wrong way, had made him imagine that Capt Bragg had run short of grape, and was firing broken glass, a portion of which had made him think he had an enemy in the rear, being decidedly damaged in that region, and, withal, it was not yet settled which party shoud yield.

Hereupon Bill Smithers stumped Jim Jones to decide it by a horse race.

I had been dozing before this, but the proposition for a horse race by moonlight, in the small hours of the night, to settle the prospect of the two Presidential candidates, seemed so decidedly rich that I determined to witness the performance.

As the horses had had nothing to eat but a rail fence for the last fifteen hours, there was no danger, in consequence of high feeding and hard running injuring them. Not having time to robe myself exactly for a daylight street walk I donned a buffalo robe, slipped on my boots, and put out. This was a very good costume for me, but a confounded unfortunate one for Bill Smithers, who rode the great National Michigander.

I didn't care so much about the starting point as I did the coming out, and so I stationed myself at the corner of the house near where that event was supposed to be about to come off.

The greater part of the crowd had gone up to the top of the hill to see fair play in the start, leaving three or four of the most leg weary to watch which should come first round the corner.

A loud shout told the start. Down they came, so close together that the judges swore there was but one, which was a strong evidence that they didn't see double, and as it turned out, I believe they really did not, for just as they neared the corner where I stood, both nags saw the buffalo, and Bill Smithers saw 'the elephant,' for while old Zack put it straight through at his best licks, Bill's horse wheeled and sheered close up to the side of the building, and suddenly disappeared, as though the yawning earth had oped her jaws as when by earthquake riven.

About that same time, I thought, as I had not been seen among the lookers on in Vienna, I might as well retire rather suddenly, and leave the mystery to be solved by the due course of events.

Accordingly, about five minutes afterwards I was dreaming that there was a very animated discussion going on as to what had become of Bill Smithers and the Gen. Cass nag, as it was indisputable that, as the record of that race, they were both to be set down as 'no whar!' in the meantime Bill began to think he was somewhere, but where that where was, he was well satisfied he couldn't tell. He thought he had seen the 'big animal,' and began to think he had rode under his belly; for every time he attempted to remount, he struck his head against something, and as the moon had gone out when he fell, he could not tell what it was that hindered his rising in the world.

How long he would have lain in that deep ocean of darkness buried, I know not, if it had not chanced that other eyes than mine had seen him. Woman—ever watchful woman—had seen the immortal Bill Smithers, astride the great Cass champion, in a run that was to settle the fate of that renowned hero, ride stern foremost down into the dark recess of the open cellar-way of the 'Traveler's Home.'

There let him and his hero rest; and while we dreamed away the balance of the night, the 'better half' of poor Bill raised a force, and, by hard digging, made out to raise him and his horse to daylight before I left the next morning.

But as Bill told me, he honestly believed he had seen the devil, and that it was a warning to him not to ride another Cass race in the dark, and that he would most truly vote for Old Zack. I quieted my conscience by thinking that 'ignorance is bliss,' and this is one vote saved, and therefore, left him a believing convert to a better faith, in which he will probably long continue, notwithstanding the publication of this veritable history. Newspapers, be it understood, are as a sealed book to that portion of our brothers of the great political family of this 'highly enlightened land,' for which our fathers fought and bled, and Bill Smithers rode the midnight race, and I wrote the history thereof.

AGRICULTURAL TOUR SOUTH AND WEST.—No. 3. [New York American Agriculturist, 8:90-92; Mar., 1849]

[December 8, 1848]

I THINK in my last communication, I parted with my readers at Dr. Philips'. The day I left there, I had a conversation with Mr. Watson,<sup>2</sup> a neighbor of the Doctor's, about the loss of stock on pea fields. Mr. W. has lost fourteen head of cattle this fall, (mostly fat heifers,) among which are two working oxen and one beeve.

¹ Reprinted in part in *Ohio Cultivator*, Columbus, Ohio, 5:101-2 (April 1, 1849).

<sup>&</sup>lt;sup>2</sup> James W. Watson, born in Port Gibson, Mississippi, 1824. Graduate of Princeton, 1844. Commenced planting in the neighborhood of Bethel, in Claiborne County, Mississippi. Owned an extensive library. Biographical and Historical Memoirs of Mississippi, 2:586.

These cattle were turned into the fields from the woods. while the peas were fresh and green, and in a day or two after, he was told that one of the herd was dead. rode out directly to examine, and found two more dead. having dropped down suddenly, and without showing any symptoms of disease; and on opening them while still warm, he found no signs of inflammation. They were all very fat. The only signs of being affected by this mysterious cause of death, as he subsequently observed, was in the discharge of dung, which had a dark grumous appearance, more like blue clay mixed with dirty water and very soft. On being turned out into the woods again, they became healthy until some weeks after, when on being admitted to the field were again attacked, and several The same result followed the same course at a later period, when the peavines had all been killed by frost.

Hogs, that are affected by eating peas, show sickness before dying and on being opened present the same appearance as when dying of kidney worm, and a thick, glutinous matter stops the neck of the bladder. Mr. Watson cures hogs, when seen in time, by feeding large quantities of warm, greasy slop, very salt. To prevent their being affected, they should be fed liberally with corn, and well salted, both before turning into pea fields, and while they are in.

One of the good results of making good channels of communication between town and country, is seen along the Vicksburg and Jackson Railroad. The cutting and sending wood to the river for 15 or 20 miles back is found more profitable than a cotton crop. Dr. E. H. Bryon, at whose place I spent a night in Havre¹ county, has found this particularly so. And as the banks of the Mississippi are becoming rapidly denuded of their forest growth, the time is near when wood from the interior lands will have to be sent in to supply the almost inconceivable enormous consumption by steamboats, and sugar making. Wood

<sup>&</sup>lt;sup>1</sup> Warren or Hinds County must have been intended here.

has been already profitably sent in flat boats from Green River, Kentucky, to New Orleans.

Profitable Culture of Havana Tobacco in Mississippi.— Mr. R. Y. Rogers, who lives among those interminable and almost inaccessible hills back of Vicksburg, raised on one eighth of an acre, the last season, a crop of tobacco, which, although only once cut, has brought him \$121, cash, leaving nine hundred cigars on hand and tobacco enough, except wrappers, to make three thousand more. The cigars readily bring him \$20 a thousand. Mr. R. is a small farmer and market gardener, and a gentleman of great enterprise, whose income from the amount invested, I presume is a greater percentage than any cotton planter in the state. In company with friend Rogers, we took saddle horses and rode over to Dr. George Smith's plantation, as the inconceivable unevenness of the surface, prevented our travelling in a carriage. would utterly surprise any one from the most hilly region of New England, to see the steep side hills here in cultivation. The plowing is done on the "level system," and the crop often has to be carried down by hand, as no cart can be driven up and down or round about, except as is sometimes done by attaching a rope to a stake on top of the hill, which prevents the cart from upsetting as it circles round, keeping the rope taught. We found on Dr. Smith's place a sample of economy often seen in other places besides Mississippi. He had about one hundred hogs, which, by dogs and traps, had been caught from the woods and shut up in square rail pens, eight to fifteen in a pen, to be fattened. I do not think that when killed they will average 100 lbs. each. The corn is shelled and boiled, and fed in troughs. The bottoms of the pens are rails—no shelter nor bed—wood, water, and corn, hauled half a mile. Now this corn, is worth 40 to 50 cts. a bushel in Vicksburg, and six miles to haul. The pork will be worth from 3 to 5 cts. Query-which would be the best economy, to shoot the hogs and sell the corn and buy pork, or feed it, with the hope of making it of such hogs-many

of them now being two years old? The Doctor's corn is of a superior quality, and made this year a good crop. Not so with cotton.

I left Vicksburg, November 28th, on my way towards New Orleans, by land. A beautiful warm sunny day, and although the paddles yesterday morning showed a good covering of ice, the cold was not severe enough to dim the blushing beauties of ten thousand roses in the gardens by the wayside. The road to-day, lying over the most uneven surface ever cultivated, passed much land "worn out" and abandoned to the washings of the rains that fills the whole surface of an old field, in a few years, with impassable gullies. On the road side, a few miles before reaching Port Gibson, there is a gully big enough to bury a small town. These hills are all composed of an alluvial deposit, with nothing to prevent washing. As soon as the roots are decayed they dissolve with greater rapidity than though composed of salt. Near Port Gibson, I passed a Cherokee rose hedge which I saw planted, four years since. It is not yet a sufficient fence, though I believe that four years does often produce that result.

November 30th. I shall have reason to remember, as I came very near losing myself, horses, and carriage, in one of those remarkable quicksand creeks of this country. This one being well known to many an unfortunate traveller on the "old Kentucky trace," by the name of Cole's Creek. I am precluded from giving a full account, but suffice it to say that I came out on the same side that I went in, and by help of negroes and oxen, got the carriage out, without any serious damage, though I had a very unpleasant job of two or three days in getting dry and waiting for a fall of water, &c. Fortunately, I met with kind female sympathy in the wife of a Mr. Mackey, by whose assistance I got my wardrobe again in wearing order. The only way of crossing these quicksands with horses, after a time of high water, is to drive cattle across to settle the sand. Horses, when they get in, often become frightened and getting their feet fast, will lay down and make no exertions to get out. This kind of stream abounds in this country, and the people say, they cannot be bridged. I think Yankee enterprise would try. Though I will acknowledge that the extreme unstable nature of the banks would make it difficult.

Visit to Mr. Affleck.—It is entirely superfluous to say that I met with a most gratifying reception from this old acquaintance of yours and mine, as well as from his most amiable wife. There are no brighter spots in life, than these meetings of old friends. I found Mr. A. as full of despondency at the result of the last cotton crop, as I have a hundred others within a few days, who complain with good reason of short crops and low prices. But as hope is the "sheet anchor of the soul," I found him full of that, upon the subject of a new business which he is now about entering upon. His little place of 47 acres. at Washington, Mississippi, he is now engaged in laving down into a nursery of fruits, shrubs, flowers, and plants —both out doors, in hot houses, and forcing beds, with the intention of supplying that region, as well as the New-Orleans market with such articles. He has an accomplished gardener, Mr. Drummond, from Scotland, and brother of him who gave the name to Phlox Drummondi;1 and he has now on the way from Mr. Rivers,2 of London, a great assortment of bulbs and plants, as well as all that he can obtain in this country. I hope his success may be commensurate with his industry. Mr. A. can exhibit some of the advantages of underdraining in his garden and nursery grounds. This he is doing with joints of

<sup>&</sup>lt;sup>1</sup>This is the original of the common annual garden phlox, now cultivated in numerous varieties. The seeds were received in England in the spring of 1835, from Texas, having been collected by Drummond. In October of that year it was described by W. J. Hooker as *Phlox Drummondii*. Bailey, L. H., *The Standard Cyclopedia of Horticulture*, 3:2587 (New York, 1925).

<sup>&</sup>lt;sup>2</sup>T. Rivers and son were prominent and skillful nurserymen of London. Their catalogues were much quoted by agricultural journals in England and America. Charleston Southern Cabinet, December, 1840, p. 741; Richmond Southern Planter, 7:312 (October, 1847).

large reed canes. He thinks that they will last many years, and when decayed, that the hole in the clay will still afford drainage for many more years. At any rate, it is a cheap experiment. He has a Cherokee-rose hedge, now three years old, that will, in another year, be a good fence.

Bermuda Grass.—This grass is much objected to in many places, on account of its tenacity of life, but Mr. A. assures me that he finds no difficulty in killing or smothering it down by crops of the cow pea. This easily-managed and most valuable grass cannot be the same kind that is so much anathematised in Georgia.

Here, for the first time, I saw the "cholera among the turkeys,"—a disease that is at least as unaccountable as that of the same name in the human system; and which has slain its thousands among that branch of the poultry-yard family, within a few months, in this region. They drop from the roost frequently, and usually quite fat. The most beautiful tenents of Mrs. Affleck's yard, and in fact that I ever saw, was a couple of domesticated wood ducks. China and African geese, thrive here as though it was their native home. One of the great pests of the poultry yard and garden are the rats, which are only kept in check by a number of excellent terriers. Yet we see a hundred curs and hounds in the country to one of these valuable little dogs.

It is a wonder where wood is scarce and dear as it is here, and where the China tree grows so rapidly, and makes such good fuel, that plantations are not made for that purpose, upon some of the old fields hereabouts, that are unfit for any thing else. Mrs. Isaac Dunbar, Mrs. A.'s mother, and who manages the "home place," has some of the finest hedges of Louri-mundi, that I have seen; and although they are not good fence, they are

<sup>&</sup>lt;sup>1</sup>Mrs. Isaac Dunbar was, before her marriage, Elizabeth Wilkinson. Her husband is mentioned in the Nashville *Agriculturist*, 4:183 (December, 1843), as winner of a premium at an agricultural fair at Washington, Mississippi, for a fine piece of linsey cloth.

highly ornamental. The plants are easily grown from seed. She is now burning vast quantities of fuel cut from the China trees, as well as locust, in the yard. On the night of December 5th, the weather was so warm, that sleeping under a sheet only, and with doors and windows open, was uncomfortable. Let readers compare notes upon this.

The roads in the vicinity of Natchez are in just such a condition as may be imagined by those who have seen the hundreds of wagon loads of cotton constantly drawn over a loose, soft soil by four or five yoke of oxen to each, during a six-weeks' "rainy spell." And particularly when it is taken into account that labor upon roads, is almost unknown. It is one of the most common things, after toiling up a very steep hill, that you find the apex so sharp that the forward wheels of a wagon begin to descend the other side before the hind ones are up. In some countries, such ridges would be dug down. I have travelled many miles of road in different places in Mississippi, worn down into ditches from four to twenty feet deep, and barely wide enough for two wagons to pass; and these continually undergoing the gullying operation, that sometimes render travelling anything but safe or pleasant, to say nothing of the bridgeless streams before mentioned. The Scuppernong grape is grown successfully in the vicinity of Natchez.

On the road between Natchez and Woodville, there are many miles of Cherokee-rose hedge, often spreading twenty feet or more wide and as many high. It is an objection to this plant, that it is very difficult to keep it within any reasonable bounds, as a hedge. Careless planting and tending, too, often shows gaps. It is also an immense harbor for rats and rabbits, and sometimes it gets so full of dead wood, as not only to be unsightly but in danger of taking fire and destroying a line of fence in a few hours. On the other hand, if well tended, it makes a handsome hedge, being evergreen, and in spring it is covered with a profusion of single white roses, that

give it a most beautiful appearance, specimens of which were frequently to be seen to-day, (December 6th,) below Natchez.

In travelling along any public road in this country, a stranger might wonder where the inhabitants were, as he may not see a house for many miles. As for instance. just at dusk on the evening I left Natchez. I opened the gate that led from the road apparently into a cotton field or a woodland pasture, and pursuing the road over a little run, up a hill, through the grove and another gate, about half or three fourths of a mile, there opens upon the view a large fine mansion, and all the appurtenences, of a rich and flourishing cotton plantation. This is the residence of Dr. Metcalf, a very estimable and enterprising gentleman, formerly from Kentucky. The Doctor, not being contented with a very good house, is now exercising his fine taste and love of building, in a very large addition to his residence, which is one of the best built houses that I have seen in the state—a plan and description of which I hope to give hereafter. thinks the use of cistern water far more healthy than that of springs or wells, though he has one 50 feet deep of clear and cool, but hard water.

Bitter coco is one of the greatest pests that the planters have to contend with, several of whom, in this vicinity, having abandoned the culture of cotton on account of the spread of this grass, which defies the art of men to exterminate. Nothing but freezing will kill it. Dr. M. penned and fatted a lot of hogs upon a patch of it, and they rooted down three or four feet after the nuts, which are about the size of large beans, black color, and strung upon a small tough black root, a dozen in a string; and he fully believed that the hogs had destroyed it; but lo! in the spring it started up thicker and faster than ever. It grows a small single blade of pale green grass, never growing high, is good for pasture, particularly for sheep, but is killed by the slightest frost. The smallest fibre of

<sup>&#</sup>x27;Possibly Dr. Asa B. Metcalf, who is mentioned in Biographical and Historical Memoirs of Mississippi, 2:586.

roots vegetate, and unless actually consumed, fire does not seem to destroy its vitality. It has been known to grow abundantly from ashes, taken from a kitchen fire where it had been thrown to destroy it! And I have myself seen it growing out of the lime mortar in the top of a sugar-house chimney, after the chimney had been used to boil a crop of sugar; and those who know anything of the intense fires used, can easily imagine that the top of a chimney is anything but a cool place!

Doctor Metcalf and his neighbor Dr. Mercer¹ have some of the best stock in this part of the state. Though I am sorry to say that there is not much encouragement among the mass of Mississippians, for enterprising public-spirited men like these, to expend money in introducing good stock, except for their own use. I saw in Dr. Metcalf's garden, a beautiful and efficient hedge of the Florida thorn, which I like better than the Cherokee rose, or the Osage orange, a specimen of which I have seen on Dr. Mercer's place. That plant, in this climate, grows naturally to a tree, and in a hedgerow does not afford sufficient thorns on the lower part of the stems. Being deciduous, too, it is less beautiful in winter than the Louri-mundi, if planted for an ornamental hedge.

On the day I left Dr. Metcalf's, I crossed the Homo-

<sup>1</sup> William Newton Mercer, born Cecil County, Maryland, 1792; died 1878. Received medical training at the University of Pennsylvania and served as assistant surgeon in War of 1812. Transferred to New Orleans in 1816, and later to Natchez, where he developed a lucrative practice. Married Anna Frances Farrar, and at her father's death, began management of his large cotton plantation. In 1843, on the death of his wife, returned to New Orleans and built a mansion on Canal Street (today the home of the Boston Club). President of the Bank of Louisiana at the outbreak of the Civil War. Although opposed to secession, joined his fellow citizens, and suffered confiscation of his property after an altercation with General Benjamin F. Butler. Jewell, Edwin (ed.). Jewell's Crescent City Illustrated (New Orleans, 1873); Rightor, Henry (ed.), Standard History of New Orleans, Louisiana, 214-15, 459-60, 498 (Chicago, 1900); New Orleans States, September 23, 1923; letter of W. H. Stephenson to Herbert A. Kellar, June 11, 1936.

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chitto River, by a very good ferry, where was once a bridge, and in fact is now, over a part of the swamp, which is traversed by a causeway some two miles long, from four to ten feet high, which will go to show some of the difficulties of bridging streams here, and an as item of excuse for the great neglect of the people to keep the roads passable. Though the excuse is by no means sufficient. For a few miles further on, I encountered another stream, called Buffalo Creek, where a new bridge was building, which I suppose was sufficient excuse for having no ferry—the boat formerly here having been sunk months ago. From the late, almost incessant rains, the creek was sending an angry flood of muddy water fifteen or eighteen feet deep, to give its aid toward extending the lands of Louisiana across the gulf of Mexico, and presenting to several travellers on the other side, almost as insurmountable a barrier as would the gulf itself. found at the place a small "dug out," and several negroes, to whom I gave a couple of dollars, (of course they wanted five,) to assist me in taking my carriage apart and carrying it over a piece at a time; and baggage, harness, and self in the same way, and then swimming the horses over. Streams are very numerous and bridges few, and ferries almost always exorbitant in charges and often very badly kept. I have often paid 50 cents to \$1 for toll over streams not twice as wide as some of the cotton teams are long. Tavern bills, too, are outrageously high, and the fare outrageously low; but of the hospitality of planters, and kindness with which I have been treated, without a single exception, I cannot speak high enough. Such a reception as I met with upon a late arrival, at the house of Mr. Horatio Smith, near Woodville, is almost sufficient to make one forget such little items as the troublesome passage of Buffalo Creek.

Of all the numerous and curious gullys I have yet seen in this curious country, one passed to-day, (December 8th,) north of Woodville, is perhaps the most so. The road for more than half a mile traverses a mere ridge,

rising out of a gulf or succession of gulfs on each side. near a hundred feet deep, in an earth of a reddish color, and much of it the tint of the peach blossom. Mr. Smith tells me that when this ridge tumbles down, as in time it surely will, that the old plantation adjoining is so full of gullies, that there will be no place for a road, without going several miles round. Mr. Smith, says, never plow nor dig the ground in the contemplated hedge row for Cherokee-rose cuttings. Scrape the surface clean, draw a line and mark the row, and then take a sharp pin, either wood or iron, the latter the best, and drive down six or eight inches, as thick as required for the plants, and drop the cuttings in these holes and hammer the earth around till it closes tight upon the stock. Planted in this way. not one in a hundred will fail, no matter how hard the ground—and it is not one half the labor as the mode in which they are usually planted. Mr. Smith gives as one of the reasons why pork is not made here to a greater extent, in these low-price times, the difficulty of having sufficiently cool weather at killing time, to save the meat. He has known hogs turned out again, after having been fatted, on account of the weather continuing so warm through the whole winter, that it could not be cured.

Although the town of Woodville and vicinity contain many excellent people, the place has got an unenviable notoriety; and "the oak" is known more widely as a scene of bloodshed than that portion of the inhabitants who belong to the peace establishment. If alcohol were utterly banished from the place, then would the town soon wear an improving look, more pleasing to the stranger.

SOLON ROBINSON.

Woodville, Miss., Dec. 8th, 1848.

AGRICULTURAL TOUR SOUTH AND WEST.—No. 4. [New York American Agriculturist, 8:117-19; Apr., 1849<sup>1</sup>] [Written January 12, 1849, covering December 9-15, 1848<sup>2</sup>]

BETWEEN Woodville and Bayou Sarah, 24 miles, is a railroad that would be of vast benefit to the cotton planters, if the company had learned the secret connected with low freights. Short crops and low prices of cotton. combined with the fact of several planters in the hill lands between Woodville and Bayou Sarah, having been very successful in the cultivation of cane the past season or two, is creating considerable excitement about making sugar in a region that it would have been considered only a few years since, madness to talk about. It is said that Dr. Wilcox,3 eight miles from Bayou Sarah, makes this year 400 hhds. of sugar upon a place that has not lately yielded over 150 bales of cotton; and that his neighbor, Mr. Fort, is making two hogsheads to the acre from land that only afforded half a bale. [It is to be remembered that a hhd. of sugar is 1,000 lbs. and a bale of cotton is 400 lbs.] It is also known that Mr. Ruffin Barrow, 5 Dr.

<sup>&</sup>lt;sup>1</sup>Reprinted in part in *The Plough*, the Loom, and the Anvil, 2:7 (July, 1849).

This article is placed here to conform to the itinerary of Robinson's tour through Louisiana.

<sup>&</sup>lt;sup>8</sup> Dr. W. Wilcox, owner of Oak Grove sugar plantation in West Feliciana Parish, near Bayou Sara Landing (St. Francisville), but not fronting on the Mississippi River. A user of improved sugar equipment, although not one of the larger sugar producers. Champomier, P. A., Statement of the Sugar Crop Made in Louisiana (New Orleans, annual, beginning with 1849); map of Plantations on the Mississippi River from Natchez to New Orleans (1858); "Directory of the Planters of Louisiana and Mississippi," in Cohen's New Orleans Directory, 1855, p. 360.

<sup>&#</sup>x27;William J. Fort, operator of Catalpa and Magnolia sugar plantations. The latter fronted on the Mississippi. Fort had a sugar house on each plantation, used modern equipment, and was one of the largest sugar planters in the state. Champomier, op. cit.; map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," op cit., 329.

<sup>&</sup>lt;sup>6</sup> Ruffin Barrow is said to have had, in 1830, a plantation of twelve thousand acres, nearly equally divided between cotton and

Perkins, and others have been successful in making sugar upon hill lands. As not one cotton planter in a hundred is making simple interest upon his investments. it is no wonder that every successful effort to cultivate sugar cane further north, and away from the immediate alluvion of the river, where it was long thought it could only be cultivated, should create considerable excitement among the upland cotton planters. And although the present low price of sugar does not offer a golden harvest. equal to California "placers," vet it is an ascertained fact that brown sugars, at three cents, produce a better result than cotton at six. And it is very evident that either owing to the seasons or acclimatization, the culture is continually extending northward, and I have no doubt that most of the cotton plantations below Natchez, will in a few years more afford twice as much sugar in value as they now do cotton. True, the amount of money required to make the change is great—of that hereafter. On the evening I left Woodville, I spent the night upon one of the oldest American plantations in this part of Louisiana, owned by General McAustin,<sup>2</sup> an Irishman, but

sugar. The beautiful plantation house which he built that year at Greenwood, is illustrated and described in Saxon, Lyle, *Old Louisiana*, 205, 327 (New York, 1929).

¹Dr. James Perkins, born in South Carolina in 1800; went to the Felicianas in 1806 with his father, Lewis Perkins. Became a famous physician. Although an old-line Whig, was elected to the state senate in 1844 by a Democratic constituency. Chairman of committee to investigate the famous "Plaquemines fraud." His sugar plantation was known as the Star Hill Refinery. Skipwith, Henry, East Feliciana, Louisiana, Past and Present: Sketches of the Pioneers, 54-55 (New Orleans, 1892); Champomier, op. cit.; map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," op. cit., 348.

<sup>&</sup>lt;sup>2</sup> Probably Robert McCausland or McCauslin, who claimed lands which he had held since 1802 in "Feliciana." Fought with Andrew Jackson in the Battle of New Orleans as a brigadier general of Militia. American State Papers. Public Lands, 2:216; 3:47 (Washington, D. C., 1834); Bassett, John Spencer (ed.), Correspondence of Andrew Jackson, 2:141, 171, 180; 6:445, and General Index, 75 (Carnegie Institution of Washington, Publication No. 371, Washington, D. C., 1926-1935).

has resided upon this place, Springfield, one mile south of the state line on the road from Woodville to Jackson, La., upwards of forty-five years, and has made a cotton crop every year, though some of the earliest ones were ginned by his own and one negro's fingers, while sitting over a log-cabin fire of a winter evening. But, in 1809, he sold a crop of considerable size at 32½ cents a pound! This "gave me a lift," remarked the General, "by which I was enabled to begin to go ahead." He is now a hale old man of 77, was a great friend of General Jackson, but a small one to some of those that have since pretended to follow the steps of that "illustrious predecessor." His reminiscences of the early settlement of this country are highly interesting, but space will not permit me to insert them here. Speaking of coco grass, he says he has seen it grow up through a pile of cotton seed, several feet thick, that was purposely put upon a patch of it to smother it. He says that "old field, black seed grass," will crowd out Bermuda grass in two or three years. The land here, though still hilly, is far less so than that I have passed over, and much better watered with springs and creeks.

General M. says he has kept sheep many years, and that they do well. The wool, originally fine, continues the same, only shorter. He has some very good horses of his own raising; having in his younger days been considerably engaged in rearing—he loves a good horse. He cultivates at the home plantation, (having two others,) about 1,000 acres, with sixty hands, and averages 300 bales of cotton—5 bales to the hand, which averages perhaps \$20 the bale. This is certainly not a very profitable income upon the value of land, stock, machinery, slaves, &c., particularly, as upon a large, old plantation like this, not more than one half of the negroes are ever counted as field hands, and estimating the plantation at the very low figure of \$50,000 and one half of the proceeds of the crop is at once taken up for interest at 6 per cent. there is the wages of one or more overseers; a large bill

for new implements, bagging, rope, &c., and half a pound of pork to fill every negro's mouth, every day he lives. besides the immense clothing bill and family expenses to be paid out of the proceeds of the annual crops. It may be argued that while cotton is so low, at least, the full supply of meat ought to be raised on the place. So it had if it can. But with all the studied economy and forethought of such men as Dr. Philips, it cannot always be done, and with men of far less calculation, the matter presents a host of difficulties unknown to northern farmers. "Well, if you can't raise pork, why not feed your negroes on beef," exclaims the northerner. Simply because it would raise a revolt, sooner than all the whip lashes ever braided in Massachusetts. Fat pork and corn bread is the natural aliment of a negro. Deprive him of these and he is miserable. Give him his regular allowance, (3½ lbs. clear pork, and 1½ pecks corn meal per week,) and the negro enjoys more of "heaven on earth," than falls to the lot of any other class of human beings within my knowledge.

On the day I left General McAustin's, I dined with Wm. G. Johnson, whom many of my readers will recognize as an old and very intelligent cotton planter. Finding he could not continue to clothe and feed a large number of negroes, many of whom had grown old with their master, he has abandoned cotton altogether and suffered a large and once fine plantation to fall to decay, and wear the weeds of desolation; using it only as a stock farm, and home for himself and old servants, while he has put all the able hands upon a sugar plantation, owned in company with his son-in-law, Wm. B. Walker, at Bayou

¹William Garret Johnson, resident near Jackson, Louisiana. One of the original Board of Trustees of the College of Louisiana, established at Jackson in 1825, and an incorporator of the Baptist Congregation of St. Francisville in 1823, and of the West Feliciana Asylum (a charitable institution for care of the poor), in 1835. Laws of Louisiana, 6 legislature, 1 session, 1823, p. 32; 7 legislature, 1 session, 1824-1825, p. 152; 12 legislature, 1 session, 1835, p. 239; St. Francisville Louisiana Journal, May 5, 1825.

<sup>&</sup>lt;sup>2</sup> William B. Walker, operator of one of the largest improved

Mauchac. There are several other abandoned plantations in Mr. Johnson's neighborhood, where buildings and fences are tumbling in ruins, and beautiful gardens grown up in briars and bushes, and large fields covered with broom sedge, the whole making a scene of desolation that is painful to pass by. And these things are not only here—they are more or less to be seen all through the cotton region. For the truth is, cotton cannot be grown at the present prices. Mr. Johnson thinks that sugar can be made at 3 cts. a pound better than cotton at six; and that anywhere within the limits of sugar growing, the same hands and lands, will average, one year with another, one hogshead of sugar for every bale of cotton.

A few miles south of Jackson, on the Baton-Rouge road, I crossed the Clinton and Port-Hudson Railroad, in a state of dilapidation. Why is it that no enterprise of this kind succeeds in this region? Dining with General Carter, I learned that his brother, on the adjoining place, made this year from four and a quarter acres of cane, (nearly one fourth of an acre of which was waste ground, in consequence of a pond,) seventeen and two thirds hogsheads of sugar. The character of the soil is clayey upland, rather flat; original growth, oak, magnolia, gum, poplar, &c., and has been cleared and in cotton about twelve years, this being the first crop of cane. Another neighbor made 42 hhds. from  $12\frac{1}{2}$  acres—certainly very encouraging to hill-land planters, and I hope the same success may continue to attend them. Though it is con-

sugar plantations in Louisiana, called Woodstock, and located in East Baton Rouge Parish, 116 miles above New Orleans, the first plantation above Bayou Manchac. Champomier, Statement of the Sugar Crop Made in Louisiana, 1849; Pike, Charles J., Coast-Directory (New Orleans, 1847); map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," op. cit., 359.

<sup>&</sup>lt;sup>1</sup> General A. G. Carter, resident of East Feliciana near Port Hudson. Associated with his brother, William D. Carter. Their sugar planting operations were of recent origin. Champomier, Statement of the Sugar Crop Made in Louisiana, 1851-1852.

tended by many that these old cotton plantations, after some of the first crops of cane, will "run out." But I cannot believe that a soil almost bottomless, if properly cultivated, can ever fail. And I will show in some of my subsequent letters, by indisputable facts, that the subsoil plow is all that is needed to renovate land that has "run out," anywhere upon this vast and inexhaustible bed of alluvion.

Immediately after leaving General Carter's we entered "the plains," a very level tract of land some dozen miles across, of a whitish clay, with frequent openings, called "prairie," however unlike they look to those I live upon. and judging from the appearance of the few scattered settlements along the road, the land affords a poor return for the cultivation bestowed upon it. Though I have no doubt that all this great uncultivated tract, lying along this road, much of it still in heavy forest, mostly beech. with magnolia, oak, poplar, &c., will some day be found to be most valuable land, when cleared and well underdrained; for water is the great detriment to cultivation on much of the soil of this region. I passed the night with Dr. Scott, who lives on the river bank, six miles above Baton Rouge. He is a gentleman of education and intelligence, but who has got such an inveterate habit of looking on the "black side" of everything, that he sees nothing but darkness in the path ahead. He says that it is idle for hill planters to think of going into the sugar business; for most of the sugar planters of the state are

¹Dr. William B. Scott, a native of Bedford County, Pennsylvania. Became a prominent Baton Rouge physician. Served for many years in the Louisiana state legislature, and was a member of the Constitutional Convention of 1844-1845. Southern University (the Louisiana state university for negroes) is now situated on the site of Dr. Scott's plantation, and a town called Scotlandville or Scotland, has developed at the back of this plantation about a mile from the Mississippi River. "Brief Biographical Sketches of Members of the Convention," in New Orleans Daily Picayune, September 8, 1844; Pike, Coast-Directory; Louisiana Senate Journals, 1836-1842; Journal of the Louisiana Constitutional Convention, 1844-1845.

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bound to fail. He has 40 acres of cane which he wishes was out of the ground again. He won't build a sugar house because he would have to become tributary to the north, and the state now imports more than she sells, and unless she will go to manufacturing right soon, and in good earnest, she must become bankrupt, &c. He complains that sugar makers are ruining the country by their enormous consumption of wood; yet, the sale of wood is the principal business of this man; and at a price, (\$2.50 a cord,) that he would not realize if it were not for the great consumption of the sugar works.

December 14th, I visited Baton Rouge, and almost as a matter of course, General Taylor, whom, if I had found on a farm, instead of in a garrison, I should have thought a plain and very sensible old farmer, who loved to talk about the business of cultivation better than anything else. From the conversation I had with him, I think that he is aware that he has got a weedy row to hoe, but that he will dig it through or die, and woe to the weeds that come in the way of his old hoe. I also made the acquaintance of T. B. Thorpe,2 from whom I received letters of introduction to several of the editorial family of New Orleans, that were afterwards of great service to me. I cannot omit here the kind remembrance of Mrs. Thorpe, than whom I have not met with a more pleasant acquaintance on my list. While in company with Mrs. Thorpe, the conversation turned upon an article lately published. in regard to a want of proper secretiveness in the Mus-

<sup>&</sup>lt;sup>1</sup> See post, 155-57.

Thomas Bangs Thorpe, author and journalist, born March 1, 1815, at Westfield, Massachusetts. From 1830 to 1853 was in Louisiana, writing, editing Whig papers in New Orleans and Baton Rouge, and making political speeches. Published two books, Hive of the Bee Hunter and Mysteries of the Backwoods, in 1845 and 1846. Removed to New York in 1853 and continued his literary activities until his death on September 21, 1878. National Cyclopædia of American Biography, 6:230 (1929). An address delivered before the Louisiana Agricultural and Mechanics' Association is published in part in De Bow's Review, 1:161-64 (February, 1846).

covy ducks about their nests. She says that all her experience goes to the contrary; that her ducks have always been unusually secretive, and thinks that is their general character in this region. I also partook of the hospitalities and kind offices of John R. Dufroca. ditor of the Baton-Rouge Gazette, Mayor of the city, &c., &c., whom his thousands of Michigan and Canada friends will delight to hear is the same highminded nature's nobleman he ever was. By his politeness and attention, and in his company. I visited the penitentiary, now being transferred by the present contractors, McHatton, Pratt & Co., into a great cotton and woollen manufactory. There are at present about 140 convicts, who are well fed, clothed, and lodged in solitary cells. They are now making 900 vards of an excellent quality of stout cotton, well worthy the attention of planters. There are a few shoemakers. tailors, and blacksmiths, besides carrying on a great amount of brick making; for the individuals having the contract for the splendid state house now building here. They get \$12.50 a thousand for the bricks laid in the wall. I saw in the penitentiary, sixteen of the best mules I ever saw together. One was seventeen hands high and well formed: though not so remarkably so as one not quite so large, and valued at \$250—none of them being worth less than \$150—the present value of the plantation mules being now from \$80 to \$125. Baton Rouge may be said to

'John R. Dufrocq, formerly of Detroit, Michigan, apparently came to Baton Rouge early in the 1840's. Upon the death of John Hueston, editor of the Baton Rouge Gazette (Whig), in a political duel in 1843, Dufrocq published the Gazette for Hueston's heirs for several months. In January, 1844, with Albert P. Converse, became owner and publisher, continuing as editor intermittently until June, 1850. Mayor of Baton Rouge, 1846-1856. Became a notary and auctioneer. Took a prominent part in the Mechanics' Association, serving as secretary in 1846 and for several years subsequently. President of the Mechanics' Institute, and its librarian, 1852. A school and street in Baton Rouge are named for Dufrocq. Baton Rouge Gazette, 1843-1856; Baton Rouge Weekly Advocate, 1850-1860; Baton Rouge Daily Comet, 1852-1856; Baton Rouge Gazette and Comet, 1856-1862.

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be the northern limit of oranges, and I saw here several trees twenty or twenty-five feet high, loaded with fruit, the most beautiful of all others, that grow upon trees. Here, at this date, many garden vegetables are in quite perfection, and roses fill the air with fragrant sweets. Mr. Dufrocg informs me that the mistletoe is killing the live oaks, in this town; the streets of which are ornamented with a great many of these most beautiful of all the family of oaks. Query—is that the cause? This town, now, or rather in 1850, is to be the state capital, contains between 2.000 or 3.000 inhabitants, on a very handsome site, fifty feet above high water, although just at present the water well mixed with loamy earth is pretty high all over town. The state house is to be one of the finest on the Mississippi. It stands fronting the river as well as three streets. It will cost, when complete, nearly half a million of dollars.

Immediately on leaving the town of Baton Rouge. commences the great levee of the Mississippi, a dam of earth extending to the mouth, and varying from one to ten feet high, by which man hath said to the mighty stream, "thus far shalt thou flow and no farther;" and by which only can the great sugar plantations of Louisiana be cultivated. But, before entering upon these, let us have another month's rest; for I have a great deal to write, some of which, I have every confidence in my ability to make interesting to my readers. That the present chapter is not more so, I am sure that they will excuse me when I tell them that it was written during my confinement to my room with an attack of the epidemic of the present winter, that has spread mourning along the banks of the Mississippi, and had it not been for the kindness of one of whom I shall speak by-and-by in commensurate terms. I should not now have been in a condition to say that I still remain your old friend

SOLON ROBINSON.

Point Celeste, below New Orleans, Jan. 12th, 1849.

## VISIT TO GENERAL ZACHARY TAYLOR [Daily Cincinnati Gazette, January 4, 1849]

BATON ROUGE, Dec. 15, 1848.

My old Friends.—I have just made a visit to the "White House," in which resides that good old man we have selected to bring about a much needed reform in affairs at Washington. I found Gen. Taylor, not exactly in camp, but dwelling in a small house of as humble pretentions as himself, in the garrison here.<sup>2</sup>

As well as I was satisfied before, I am more so since I have become personally acquainted with him, and some of his immediate neighbors.

None except the bitterest Locofocos speak of him in anything but terms of deep respect for his excellent character, and in full satisfaction of his commanding abilities and talents for the office of President.

Gen. Taylor told me that he was already overwhelmed with applications for office: so much so that it occupied all his time not necessarily devoted to business, to read the numerous letters, many of which are long and tedious, so that it is quite out of his power to give answers. "Besides," says the Gen., "I am not yet President, and when I am, let these applications be made through the proper departments, and if it is wished to remove an incumbent, let it be shown that he does not answer the Jeffersonian standard for an office-holder, and that the applicant does; for as far as lies in my power, I intend that all new appointments shall be of men honest and capable. I do not intend to remove any man from office because he voted against me, for that is a freeman's priv-

<sup>&</sup>lt;sup>1</sup>This article appeared in the *Logansport Telegraph*, January 13, 1849, under the heading "Correspondence of the Cincinnati Gazette."

<sup>&</sup>lt;sup>2</sup> General Taylor had been placed in command of the southern division of the western department of the Army in 1840. His home at Baton Rouge was a simple cottage consisting of three or four rooms, inclosed under galleries, and had been originally erected for the captain commandant when the post belonged to Spain. Howard, Oliver Otis, General Taylor, 76-78 (New York, 1892).

ilege; but such desecration of office and official patronage as some of them have been guilty of to secure the election of the master whom they served as slaves, is degrading to the character of American Freemen, and will be a good cause for removal of friend or foe.

"The offices of the Government should be filled with men of all parties; and as I expect to find many of those now holding to be honest good men, and as the new appointments will of course be Whigs, that will bring about this result.

"Although I do not intend to allow an indiscriminate removal, yet it grieves me to think that it will be necessary to require a great many to give place to better men. As to my cabinet, I intend that all interests and all sections of the country shall be represented, but *not* as some of the newspapers will have it, all parties. I am a Whig, as I have always been free to acknowledge, but I do not believe that those who voted for me, wish me to be a mere partizan President, and I shall therefore try to be a President of the American people.

"As to the new territory, it is now free, and slavery cannot exist there without a law of Congress authorizing it, and that I do not believe they will ever pass.

"I was opposed to the acquisition of this territory, as I also was to the acquisition of Texas. I was opposed to the war, and although by occupation a warrior, I am a peace man."

Upon the subject of improving our great rivers and lakes, the friends of that measure may rest satisfied that they have a friend in President Taylor.

Gen. Taylor was sixty-four years old last November. He is now hale and hearty, and in the full enjoyment of his natural strong intellectual faculties.

I hold my judgment tolerably good of human character, and I must say that I was highly pleased with my interview, and left him fully satisfied of his capability to fill the Presidential office with honor to himself and our country.

I fully believe that all classes of people will soon feel the beneficial effects of the prosperity and confidence that will fill the minds of the people during his administration.

I hope I shall not be accused of visiting Gen. Taylor to beg for an office, when I state that I left home nearly a month before the election on a tour through the South, connected with my *hobby*—agricultural improvement—a subject upon which I found General Taylor most free to converse.<sup>1</sup>

In truth there is but one office in his gift that I would be willing to accept—and that only to help along my hobby—and that I would not ask for, or even name.

Lest you think me tedious, I will close, with assurance of respect. Yours, SOLON ROBINSON.

¹Alas for Robinson's hope! The Valparaiso Western Ranger, of February 14, 1849, carried the following item from the Chicago Democrat:

## "A VISIT TO GENERAL TAYLOR

"Among the immense number of lean and hungry politicians who have been to see Taylor to get office is the celebrated Solon Robinson of Lake County, Indiana, the greatest humbug in the North West. He wants to be the Commissioner of Patents.

"Taylor is said to have told Robinson after he had told him how much he was doing in the agricultural world, as Johnson once did a preacher who wanted office, 'I can do nothing to take you from your theatre of usefulness. You must be doing a great deal of good where you are.'"

The issue of February 21 made apology:

## "EDITORIAL

"An article speaking in severe terms of our friend Solon Robinson accidentally found its way into our paper last week. We would not urge a word against Mr. Robinson's qualifications for the office to which he aspires; we believe him to be better qualified for that, or any other civil office, than Gen. Taylor."

AGRICULTURAL TOUR SOUTH AND WEST.—No. 5. [New York American Agriculturist, 8:143-44; May, 1849] [Covering December 15-19, 1848]

Visit to the Plantations of Louisiana.—Directly after leaving Baton Rouge, down the Mississippi, we pass a long reach of uncultivated wooded tract, belonging to Mr. John McDonough,¹ of New Orleans, who, like many other land misers in this country, appears to buy to keep—not to cultivate. Then comes the plantation of the lamented Mr. Chambers,² who was recently crushed to death in his sugar mill, in consequence of entangling his coat in one of the ponderous iron wheels. To-day, (December 15th,) I noticed a gang of negroes gathering cane from the windrows, and carting it to the mill. No cane is to be seen standing here, having all been cut for fear of frost.

The next plantations we meet with, are those of Col. S. Henderson,<sup>3</sup> Madame Williams,<sup>4</sup> and of Col. Philip

¹ John McDonogh, merchant and philanthropist, born December 29, 1779, at Baltimore, Maryland; died October 26, 1850. Went to New Orleans as agent for a Baltimore merchant. After 1803 put all his capital into West Florida and Louisiana lands. Retired from mercantile business in 1806 to attend to his properties, which grew to be enormous. Director of the Louisiana State Bank. Took part in Jackson's defense of New Orleans. About 1817 removed from New Orleans to one of his plantations across the river. Sent about eighty slaves to Liberia in 1842, but purchased more when these departed. Left his fortune for the education of the youth of New Orleans and Baltimore. Dictionary of American Biography, 12:19.

<sup>2</sup> David Chambers, Iberville, Louisiana. Received second premium for sugar at the fair of Louisiana Agricultural and Mechanics' Association in 1844. Nashville *Agriculturist*, 5:20 (1844).

<sup>3</sup> Colonel Stephen Henderson, Union Parish, Louisiana. Sugar planter. Treasurer and chairman of the Executive Committee of the Louisiana Agricultural and Mechanics' Association for 1847. Nashville Agriculturist, 5:17 (1844); De Bow's Review, 4:424 (December, 1847); Monthly Journal of Agriculture, 3:148 (October, 1847). For a description of his method of working slaves, and food allowance for slaves, see Moody, V. Alton, Slavery on Louisiana Sugar Plantations, 20, 60, 77 (reprinted from Louisiana Historical Quarterly, 7:191-301, April, 1924).

'Madame Williams, widow of Dr. J. C. Williams, for many years

Hickey. The latter gentleman has raised sugar upon his place thirty-five years. In 1817, his father sold his crop of sugar for 11 cents per pound, and his cotton for 30 cents. On the 19th of October, 1813, the frost killed all his cane. Sugar was worth, that year, 12 cents per pound. In 1814, he was offered two pounds of cotton for one of sugar, but while loading his boats they were pressed into the surface of Uncle Sam, and he lost the sale. Had the bargain been consummated, he would have realized 30 cents for his cotton, which would have made him 60 cents per pound for his sugar. Col. Hickey is of opinion that bagasse, (the refuse stalks of sugar cane after they have been ground,) is unfit for manure until it has been rotted a great number of years. The best way to dispose of it he thinks is to use it as fuel.

A couple of miles below, is the plantation of F. D. Conrad,<sup>2</sup> Esq., of which I shall have much to say hereafter. In front of his house is an extensive batture. *A batture*.

a prominent physician of Baton Rouge and operator of an extensive cotton and sugar plantation called Arlington. The plantation was located in East Baton Rouge Parish about four miles below Baton Rouge. Champomier, Statement of the Sugar Crop Made in Louisiana, 1849; Pike, Coast-Directory; map of Plantations on the Mississippi River.

¹ Philip Hickey, born 1777, at Manchac, then an important post of West Florida. Signer of the Declaration of Independence of West Florida, 1810, and influential in securing its peaceable acquisition by the United States. First representative of Baton Rouge Parish in the Louisiana state legislature. Pioneer in culture of sugar cane; erected the first sugar mill in the parish in 1814. De Bow's Review, 11:612-14 (December, 1851). President, Louisiana Agricultural and Mechanics' Association, 1844, 1847. Nashville Agriculturist, 5:17 (1844); De Bow's Review, 4:423 (December, 1847). The Hickey plantation as it was in 1802 is mentioned in Louisiana Historical Quarterly, 10:491 (October, 1927).

<sup>&</sup>lt;sup>2</sup> F. D. Conrad was vice-president and a member of the Executive Committee of the Louisiana Agricultural and Mechanics' Association, 1844, 1847. The Cottage, ten miles from Baton Rouge, home of the Conrad family, was built in 1830. It was, in 1929, the property of Mrs. Fanny Conrad Buffington-Bailey. De Bow's Review, 4:424 (December, 1847); Nashville Agriculturist, 5:17 (1844); Saxon, Old Louisiana, 305.

is a recent formation of land by deposite from the muddy water of floods, until it gradually rises so far above low-water mark as to make good pasture land, and at length is enclosed by a levee for cultivation. Mr. C. has some 70 or 80 head of horned cattle, among which are some very good shorthorns for this part of the country, though not at all to be compared to this breed at the north. He also has a flock of some 150 sheep that are much above the average quality of the south.

In his lawn in front of his house, Mr. C. has had the good taste to plant specimens of all the forest trees native to his region, among which I noticed the live oak, the water oak, the willow oak, the white oak, the yellow oak, the chincapin oak, the cypress, the sycamore, (Platanus,) red elm, slippery elm, sweet gum, (Liquidambar), cotton wood, pecan nut, white ash, hackberry, and many others. To these might be added the pride of China, now almost ever present upon every plantation of the south.

About one half of the planters along my ride today have done grinding, (or, "rolling," as it is most commonly called,) their cane, while others have suspended operations on account of the long-continued rains that have fallen of late.

I passed the night with Mr. William B. Walker, son-inlaw and partner of Mr. Johnson, whom I mentioned as having abandoned his cotton lands, and put his negroes to raising sugar. Mr. W. has great faith in the opinion that bagasse cannot be disposed of in any way so economically as in the chimneys. He thinks that manure is an injury to his land rather than a benefit. Three years ago, he manured a field of sweet potatoes which all run to vines. The next year, he planted the same ground with sugar cane, which grew large and watery, and lodged so badly that the yield was not so good as upon the land adjoining, that never had been manured.

Noticing some very pure water on the table, and knowing that the river was very muddy just now, I inquired how it was purified. This I found was done by pounding

a handful of peach kernels and throwing them into a cask of water, which soon caused it to settle. Almond kernels will effect the same.

At Iberville Church, December 16th, I saw the first growing cane on the estate of Dr. Pritchard,¹ who came here from Connecticut about 30 years ago, and after much persevering toil, has finally got a very beautiful residence, and an excellent plantation, which is kept in admirable good order. For several miles below Dr. P., the coast is lined with small planters, a few of whom try to make a little crop of sugar with the old primitive horse mill, which is as great a contrast to the modern steam mill, as the people are to the modern class of sugar planters.

To-day, December 18th, I dined with Mr. Robert C. Camp,<sup>2</sup> who keeps from 200 to 500 sheep for the purpose of feeding mutton to his people, which he finds a very healthy diet. The wool is quite a secondary object with him, as it is with nearly all who keep sheep along the banks of the Mississippi, some of whom actually give it away for shearing, boarding the shearers in the bargain. Mr. C. has always found his flock healthy, except the foot rot. The sheep also increase very rapidly all along this coast, as they breed freely at all seasons of the year. It may seem surprising to the people east, that planters do not raise more sheep for mutton, even if the wool is not worth saving; but the fact is, mutton is altogether too light a diet for negroes. They want nothing more delicate than good, fat mess pork.

<sup>1</sup>Dr. J. Pritchard contributed an article on "The Degeneration of the Sugar-Cane," to Report of the Commissioner of Patents, 1849, pt. 2:423-24.

<sup>2</sup> Robert C. Camp, one of the larger sugar producers, but not an employer of the most up-to-date manufacturing processes. Operated the Indian Camp plantation, Iberville Parish, ninety-six miles above New Orleans. Champomier, Statement of the Sugar Crop Made in Louisiana, 1849; Pike, Coast-Directory; map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," in Cohen's New Orleans Directory, 1855, p. 320.

The next place below Mr. Camp's, that I visited, belongs to the Messrs. Tilotson.1 From the river to their sugar house, a distance of two miles and a quarter, they have laid down a cedar railway, at a cost of \$2,500, for the purpose of conveying their sugar and molasses for shipment. But whether it will prove profitable is a mooted point.<sup>2</sup> Others have tried the like, and have given it up as a bad job. These gentlemen having been brought up in a hay country at the north, think that they cannot do without dry fodder here. So, every winter, they put in some 30 acres of oats, harrowing the ground smooth at the time of sowing, and after the oats are harvested, they obtain a spontaneous crop of crab-grass hay, which is very good, if mowed early, being the only kind of grass that they can cultivate with advantage.

After leaving Messrs, Tilotsons, December 19th, I passed several very fine places, among which were those of William Miner, 3 John Miner, 4 Henry Dogal, 5 (one of the oldest, largest, and most successful sugar planters in

<sup>1</sup> Messrs. S. & R. Tillotson, sugar planters of New River, Ascension Parish, Louisiana. In a letter of January 3, 1850, Mr. S. Tillotson mentions the adoption of new machinery which permitted the making of the entire crop into white sugar, direct from the cane juice. Cultivator, n.s. 7:119 (March, 1850).

<sup>2</sup> This railroad is described in a letter of December 30, 1849, to the Cultivator. At that time the Tillotsons estimated that the stock paid fifty per cent per annum, and that the road would last twenty years. The letter concluded: "Let us have a railroad all the way from New-York to New-Orleans-then where could the Union be divided? Ibid., n.s. 7:148 (April, 1850).

<sup>8</sup> William John Minor, of Southdown, Houma, Louisiana, born in 1808; died in 1869. His half-sister, Martha Minor, married William Kenner, a close relative of Duncan and George Kenner. Arthur and Kernion, Old Families of Louisiana, 363.

<sup>4</sup> John Minor, son of William John and Rebecca Gustine Minor. Ibid.

<sup>5</sup> A Henry Doyle is listed in the "Statement of sugar made in Louisiana, in 1844," Appendix 13, Annual Report of the Commissioner of Patents, 1845, p. 880, as owner of a plantation between John Minor and T. P. Minor, Ascension Parish. The plantation sugar output is listed as 1,539 hogsheads, as against 812 hogsheads for William J. Minor, and 350 hogsheads for the Tillotsons.

the state,) Duncan F. Kenner,¹ and of General H. B. Trist,² brother to the much celebrated "Don Nicholas,"³ of Mexican treaty memory. General T. is not one of those who think it useless to read agricultural works, because they happen to be printed at the north; but, on the contrary, his library is well stored with such publications as it is for the interest of the sugar planter to consult.

SOLON ROBINSON.

AGRICULTURAL TOUR SOUTH AND WEST.—No. 6. [New York American Agriculturist, 8:177-79; June, 1849]

[December 28, 1848]

The Ormond Plantation. — This is the name of the Messrs. McCatchon's place. It is the custom of the coun-

Duncan F. Kenner, born in Louisiana, 1813. Half owner with his brother, George R. Kenner, of Ashland plantation, and later sole owner. Elected to the Confederate Congress. Minister to France from the Confederate Government to induce recognition for the seceding states. Vice-president of the Louisiana Agricultural and Mechanics' Association, 1844. Probably the largest slaveholder in the South. He died in 1887. Nashville Agriculturist, 5:17 (1844); Arthur and Kernion, Old Families of Louisiana, 159-60. George R. Kenner was born in 1812. After selling his interest in Ashland, he purchased a Kentucky estate opposite Cincinnati. He later moved to Texas, and died in 1853.

<sup>2</sup> General Hore Browse Trist, of Bowdon, Ascension Parish. Born in Washington, D. C., March 19, 1802; died November 16, 1856. He and his elder brother, Nicholas Philip Trist, were wards of President Jefferson and were reared at Monticello. Commander in chief of the state troops of Louisiana. *Ibid.*, 429.

\*Nicholas Philip Trist, lawyer, born June 2, 1800, at Charlottesville, Virginia; died at Alexandria, Virginia, February 11, 1874. Educated at United States Military Academy. First clerk of Treasury Department, 1828. Private secretary to President Jackson, 1829. United States consul at Havana, 1834-1836. Assistant secretary of state, 1845. Peace commissioner to Mexico, 1848, where he negotiated and signed the treaty of Guadalupe Hidalgo. Translated a treatise on "Milch Cows" from the French, 1857. Appletons' Cyclopædia of American Biography, 6:161.

'James W. and Stephen D. McCutcheon. The house, in St. Charles Parish, is illustrated and described in Saxon, Old Louisiana, 45, 295-97. See also Champomier, Statement of the Sugar

try, in Louisiana, to give every plantation a name, as the country here is only divided off into parishes, which are equivalent to counties at the north; while the smaller subdivisions are known as points, bends, bayous, and by the names of the plantations. Ormond Plantation is among the oldest sugar estates in Louisiana, having been planted in cane upwards of forty years, by the father of this family, and two or three years before, by his brotherin-law, Mr. Butler, previous to which a little opening had been made by a Frenchman, who raised a little cotton, indigo, rice and corn. Part of the present mansion is the old house, near a hundred years old. Mr. Butler erected a horse mill, (a portion of the building is still in use,) which the late Mr. McCatchon used about twenty years, when he had the present engine and mill put up. and enlarged his sugar house to suit the necessities of the increasing crop.

The place now contains 1,600 arpents, (about one seventh less than the English and American acre,) of land, 850 of which is in cultivation, and from which this family have made 120,000 hogsheads of sugar, and an average of 50 gallons of molasses to each hogshead; that is, 200,000 barrels, or six million of gallons, a sea of treacle sufficient to supply all New England with thanksgiving pumpkin pies, at least one year; and then have enough to furnish gingerbread for all the "muster days" besides. The last crop upon the place was about 550 hogsheads. (In all my statements I shall consider the hogshead 1,000 lbs., that being the understood weight of a commercial hogshead of sugar.) When I was there at Christmas, they had not finished making, and the cane from old land was yielding two hogsheads to the acre, or rather arpents, as the terms are promiscuously applied, but always mean the latter.

Crop made in Louisiana, 1849; Pike, Coast-Directory; map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," in Cohen's New Orleans Directory, 1855, p. 342. Stephen D. McCutcheon was a delegate from the parish to the Southern and Western Railroad Convention, New Orleans, January, 1852. De Bow's Review, 12:306 (March, 1852).

This good yield they attribute to subsoil plowing, which Mr. James McCatchon told me was worth thousands of dollars a year to them. Another thing, they never burn trash, (cane tops and leaves,) but plow all in and let it rot.

To give some idea of the enormous amount of ditching upon a sugar plantation, I will state some items. are upon this place near 100 miles of leading and cross ditches. The water of these is taken up by three leading canals, some three miles long, and large enough for a considerable boat, that lead the water back through the swamp to a bayou, and thence into Amite River and Lake Maurepas. Then, there is the levee and public road, a mile and a half long, with a ditch on each side, and about 25 miles of plantation roads and two hundred bridges, all to be kept in order. The leading ditches, running from the levee in straight lines back to the swamp, are about three feet deep, and 80 to 100 feet apart, and all have to be cleaned out once or twice a year. The cross ditches are not so deep nor so near together. If you should object to the amount of ground taken up by roads and ditches, you will be told that it is no loss to the cane crop, as it needs the circulation of the air that these spaces give. The roads are ditched on each side and handsomely graded. and when smooth and dry, form most delightful drives. The ground occupied by roads is not lost for a crop. Upon many of them, as soon after the "rolling season" is over. as they can be smoothed off and ditches cleaned out. a crop of oats is sown, which are mowed for hay, and afterwards a crop of crab grass is harvested upon all the roads, ditch banks, and open spots, which makes very good hav, a large quantity of which is required, although there is really little or no winter to prevent cultivated grasses from growing; yet, they are not growing, because, as it is said, the summer sun kills them. The only winter grass of any consequence in the fore part of the winter months is white clover; and the only pasture land is the levee, road, and "batture" in front. In some places "batture" is very extensive; and when not covered with high water, is very valuable for pasturage. Upon some plantations a fair portion of land is devoted to pasture ground, while upon others they can't affort it; and so the whole stock must be fed with hay or fodder, (corn blades,) and corn. This is why the consumption of corn will appear so enormous in some of the statements that I shall give by and by.

There are upon this place 190 negroes, old and young, about half of which are counted as "field hands." The team is 60 mules and 40 yoke of oxen, though the latter are but little used except to haul wood out of the swamp; and there, too, they get a good portion of their living. Some six or eight family horses are also kept. There are in use, 40 carts, wagons, and drays. Some of the carts are enormous vehicles of the kind, though no more so than is common elsewhere. Some work them with three mules abreast, which is most common; but here they are worked with one in the shafts and two ahead. The wheels are often six feet high, and stronger and heavier made than New-England ox carts.

The wagons are equally strong, with beds made to hold 100 bushels, and to tip out the loads. This brings an undue weight upon the hind wheels, which is very great when full loaded with cane, and very injurious to bridges and roads. The plan of setting the beds upon the railroad plan, so as to sit fair and equal upon fore and hind wheels, and shove back to tilt, would obviate this trouble.

The number of plows of all kinds upon this place, is too great to keep count of. It is common to plow with four to six stout mules, and then follow with the subsoil plow. It is the intention of the Messrs. McCatchon to subsoil all the land planted in cane; and they often run a smaller subsoil plow upon each side of the "rattoons." These are canes growing from the old roots the 2d and 3d, and sometimes the 4th year. This, they think, facilitates drainage, which is one of the all-important things to be attended to on a Louisiana sugar plantation. Deep

plowing, they think, keeps the coco grass in check, besides all its other advantages. They also make great use of the pea vine to renovate and improve their soil. I first saw here an instrument called a "sword," to cut pea vines when plowing them under. I will, hereafter, give a drawing of this implement, and the manner of attaching it to the plow.

Everything about this place, not only indicates wealth, but judgment, skill, and taste. The negro cabins are all good, substantial, neat, brisk houses, some thirty in number, all of the same size, colored yellow, to correspond with the mansion, standing in an enclosed lot, with the overseer's house, tool houses, corn cribs, &c. The negroes I found all neatly dressed, and fine, healthy, happy laborers. The "cane cutters," thirty-six in number, all in blue woollen shirts, with their formidable-looking weapons, the cane knives, were quite a "uniform company," that might do the state some service in times of peril.

I did intend to describe the Christmas dinner, but I am taking up quite too much room. I must, however, mention the turkey fatted upon pecan nuts, as the finest I ever ate. The turkey is shut in a small, dark coop, and fed upon cracked nuts ten or twelve days, and nothing else. We also had a quarter of a young bear, from a friend over the river, and green peas, beans, tomatoes, beets, carrots, lettuce, and radishes, all fresh from the garden.

The Messrs. McCatchon have a great variety of young fruit trees, and formerly oranges grew here abundantly. In 1822, a hard freeze killed the trees, and again in 1834. At the latter time the family took "a sleigh ride." Everything was encased in ice. Flowers and oranges, in their crystal coating, glistened in the sun like enchanted scenes in the gardens of fairy land. All was bright and beautiful, but it was the beauty of death. Apples have been tried and always failed. In the back yard of the house are two live oaks, that Mr. McCatchon planted about 40 years ago, that are now two of the finest shade trees I

ever saw. About eight or ten feet from the ground, the limbs begin to spread out and extend 40 or 50 feet from the body, forming a very thick, handsome, round top.

At this place, I first learned the value of bagasse as fuel. Here is a very well-arranged plan of saving and burning it, a full and minute description of which I will give in my articles upon sugar culture. This year, 350 hhds. were made with this, alone, for fuel under the kettles.

This land, which has been so long in cultivation, and still brings good crops, offers strong evidence of the lasting fertility of the Mississippi soil, when treated only in a decent manner. Of course, it is impossible to manure a sugar plantation in the way that some small tracts of grass and grain land at the north are; and it is not required, if the same system was universal that prevails here, of deep plowing and turning under trash and pea vines, and the use of the subsoil plow and thorough ditching, with judicious changes from corn to cane, and good use of all the manure that can be made. Sugar may be continued to be made from the same land, "even unto the third and fourth generation."

I intended to call upon Judge Rost, whose place is next below Messrs. McCatchons, but he was absent. He is one of the few planters who study science to apply it to practical operations of planting sugar cane. He has a draining machine upon his place, driven by steam. I was

¹ Pierre Adolphe Rost, soldier and jurist, born in France, 1797; died September 6, 1868. Immigrated to United States in 1816, first settling at Natchez, where he taught school and studied law. Later moved to Louisiana. Served in the state legislature of Louisiana and as one of the judges of the supreme court. Gave important addresses on the culture and manufacture of sugar before the Louisiana Agricultural and Mechanics' Association, and contributed articles to the Monthly Journal of Agriculture and The Plough, the Loom, and the Anvil. In 1862 was sent to Spain as commissioner for the Confederacy. National Cyclopædia of American Biography, 11:468. Besides the sugar plantation in St. Charles Parish, Judge Rost owned a cotton plantation on the Red River. See De Bow's Review, 6:296-99 (October and November, 1848).

also unlucky in not meeting either of the Messrs. Kenner, very enterprising and large planters, between Ormond and Carrolton, the latter of which is connected with this city by a railroad six miles long.

The first acquaintance I made in New Orleans, was Mr. Stephen Franklin, now conducting the agricultural warehouse, established in that city by R. L. Allen, and where every kind of implement used in the cultivation of the soil can be obtained. Mr. F. is an eastern man, but has been so long a resident here, that he is like one "to the manor born." He was formerly a cotton merchant, and is extensively acquainted in the city and country. I commend my friends to him, as a very pleasant and useful acquaintance.

Mr. R. L. Allen, in his "Letters from the South," has given statistical tables, to show the amount of agricultural produce annually shipped to and through New Orleans.<sup>2</sup> But one might just as well undertake to show the magnitude of the ocean, and the fearful raging of the storm at sea, by filling a junk bottle with salt water, and shaking it before the eyes of his pupil, as to try to give an idea of the business upon the levee here, by a string of words and figures. It must be seen, to be believed; and even then, it will require an active mind to comprehend acres of cotton bales standing upon the levee, while miles of drays are constantly taking it off to the cotton presses, where the power of steam and screws are constantly being applied to compress the bales into a lesser bulk, at an almost inconceivable rate per day, while all around are piled up in miniature mountains, which other miles of drays are taking on shipboard, and yet seem unable to reduce in size or quantity, either here or upon the levee; for boats are constantly arriving, so piled up with cotton, that the lower tier of bales on deck are in the water; and as the

<sup>&</sup>lt;sup>1</sup> Stephen Franklin, agent for the New Orleans Agricultural Warehouse, located at the corner of Magazine and Poydras streets. His residence was at 139 Rampart Street. Cohen's *New Orleans Directory*, 1849.

<sup>&</sup>lt;sup>2</sup> See American Agriculturist, 6:124-25 (April, 1847).

boat is approaching, it looks like a huge raft of cotton bales, with the chimneys and steam pipe of an engine sticking up out of the centre. And this is but one item of one branch of the produce business of New Orleans.

The whole fields of sugar hogsheads, molasses, pork, beef, flour, lard, oil, rice, meal, apples, and whiskey barrels, and bags of corn, oats, rve, barley, wheat, beans, peas, bran, potatoes, and cotton seed, bundles of hay, together with every other conceivable thing that ever grew out of the earth, are in such wonderful quantities, that the stranger is overwhelmed in wonder to know from whence cometh all this mighty mass of the products of the earth. It is utterly impossible to remove the daily accumulations as fast as they arrive; and at night, and every night, acres of such things as the weather might damage, are covered over with tarpaulin cloths, and guarded by watchmen. The time is rapidly coming, such is the vast increase of production in the fertile soil of the Mississippi Valley, when the whole river front will be insufficient to accommodate the shipping trade of the city, and slips will have to be cut into the land; and great basins, or docks, like those of Liverpool and London, will have to be made, to give room for the giant of commerce to expand his young limbs. Or, perhaps, a great ship canal, from the river to the lake, will not be thought to be a visionary notion, at some future time; or a canal that shall leave the river at Carrolton, and encircle the present city, and enter the river again below, which would give three times the landing room that there now is, will not be considered half so wild a scheme, as did the idea to some of the ancient inhabitants of New Orleans, of building houses in the swamp where now stands the St. Charles Hotel, and half the business part of the second municipality.

But let us leave speculation of what New Orleans is to be, for who knoweth, and proceed with facts. I have only given these notes just for the sake of trying to give some who have never seen the elephant, an idea of the immensity of the animal.

Solon Robinson.

New Orleans, Dec. 28th, 1848.



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AGRICULTURAL TOUR SOUTH AND WEST.—No. 7. [New York American Agriculturist, 8:219-20; July, 1849]

[December 29, 1848]

HAVING spent a night with Dr. Bingay, at whose house the reader will bear in mind I stopped over to rest. It was here that I saw the coco grass, mentioned in a former letter, as growing out of the top of a sugar-house chimney. The Doctor is a small planter, and has just erected a new horse mill, of which I shall speak more particularly hereafter. He is a practicing physician, and I believe a very well-informed man, full of activity and enterprise. But as I shall have occasion to speak of the Doctor again, let us ride on.

The next place worthy of note, is that of Col. Preston,<sup>2</sup> of South Carolina, son-in-law of the late Gen. Hampton. It is a part of the "Houmas Grant," the other part being owned by his brother-in-law Col. Manning.<sup>3</sup> Col. P. has

¹ Dr. J. P. Bingay (spelled also Binguet), in 1849 operator of a small sugar plantation in Ascension Parish on the east side of the Mississippi, just south of the Bowdon plantation, owned by the Trist family. In the middle fifties and after, apparently operated a sugar plantation in St. James Parish, sixty-six miles above New Orleans. Champomier, Statement of the Sugar Crop Made in Louisiana, 1849; Pike, Coast-Directory; map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," in Cohen's New Orleans Directory, 1855, p. 317.

<sup>2</sup>John Smith Preston, born near Abingdon, Virginia, April 20, 1809; died at Columbia, South Carolina, May 1, 1881. Married Caroline Hampton in 1830. Moved to South Carolina; then to Louisiana. Engaged extensively in sugar planting. Built Burnside plantation house in 1840. Ardent secessionist. Joined staff of General Beauregard in 1861; later transferred to conscript department with rank of brigadier general. Lamb's Biographical Dictionary of the United States, 6:346 (Boston, 1903); Saxon, Old Louisiana, 303-4; Spratling, William P., and Scott, Natalie, Old Plantation Houses in Louisiana, 46-49 (New York, 1927).

<sup>3</sup> Colonel John Laurence Manning, born at Hickory Hill, Clarendon County, South Carolina, January 29, 1816; died at Camden, South Carolina, October 29, 1889. Married Susan Frances Hampton. For several years conducted a sugar plantation in Louisiana, but subsequently returned to South Carolina and resided at Sum-

about 2,000 arpents, under cultivation, and 350 hands in the field and 750 in all, upon the place, under the management of Capt. Sheafer, a very intelligent and pleasant gentleman. It takes 150 horses and mules to work this place, which is rather under the usual number upon other plantations. The last crop, which he considers "almost a failure," was 1,100 hogsheads of sugar.¹ All the land on the river is measured by *arpents*, which contain, within a small fraction of 18 per cent. less than an acre.

I counted in one "quarter," (the name given to the negro houses,) upwards of 30 double cabins, all neatly whitewashed frame houses, with brick chimneys, built in regular order upon both sides of a wide street, and which is the law, must be kept in a perfect state of cleanliness. Feeding the force on this place is not quite equal to feeding an army, but it takes nine barrels of pork every week, which, at an average of \$10, is \$4,680, per annum, cash out, for that item alone. The regular allowance of pork to all field hands, is four pounds, clear of bone, per week, with as much corn meal as they can eat, besides molasses. sweet potatoes, vegetables, and occasional extras of fresh beef and mutton. Children's rations, 1½ pounds of pork per week, and full supply of other things. This place being in a bend of the river, the front is comparitively very narrow, (34 arpents, or about 28 to a mile,) and "opens out," as the lines run back, like a fan, which is the way that all the lands were originally laid off. On points, on the contrary, the lines run together in the rear, the fan opening the other end foremost.

ter. Served in South Carolina legislature. Governor of South Carolina, 1852-1854. On staff of General Beauregard during Civil War. Elected to United States Senate from South Carolina, 1865, but with other southern senators, not allowed to take his seat. Lamb's Biographical Dictionary of the United States, 5:346-47.

According to the "Statement of sugar made in Louisiana, in 1844," Annual Report of the Commissioner of Patents, 1845, pp. 880 and 881, Colonel Preston's plantation on the right side of the river, Ascension Parish, produced 358 hogsheads of sugar. His plantation on the left side of the river produced 1,966 hogsheads.

An ox-breaking machine, I saw at Dr. Wilkins'.1 consists of a pole about ten or twelve feet long, fastened on top of a stump by a bolt, so it will turn round freely, the steer being fastened at the other end with a strong bow. and having a rope fastened around his loins and to the pole, he is left to go round and round, until, on being taken out next day and yoked in the team, he is ready and willing to go ahead. Dr. W., who has this machine, says he copied it from some agricultural paper, and as he owns a large steam sawmill, and has a great many steers to break every year, he would not be without it for a hundred dollars a year. But still, to use it, is "book farming." Perhaps a little more such book farming would be economy. He also says that bleeding a horse until he faints and falls, will cure the worst case of colic, and not injure the horse. [Doubted.—EDS.] Although he owns a thousand acres of cypress swamp, the difficulty of getting the lumber out, unless he should first dig a canal, is so great that he buys all his logs in rafts that come down the river. Lumber is worth \$12 to \$30 a thousand. He has in operation at his mill, a stave-making machine, that makes six to eight staves a minute. It is the same kind of machine, I believe, patented and in use in the state of New York, and in this sugar region where so many barrels and hogsheads are used, it ought to be in general use. I commend it to the attention of planters. They can easily see it in operation, and learn its labor-saving powers.

Mr. Fagot,<sup>2</sup> a very polite French gentleman, whose first

<sup>&</sup>lt;sup>1</sup> Possibly Dr. William F. Wilkins, engineer and sugar maker, Opelousas, Louisiana, who contributed an article to the March, 1852, issue of *De Bow's Review* (12:286-87).

<sup>&</sup>lt;sup>2</sup> Charles Fagot de la Garcinière, planter of St. James Parish, born August 30, 1793, at his father's plantation in the Attakapas country at Isle de Cyprès; died in New Iberia, August 13, 1872. Dropped the de la Garcinière from his name. As orderly sergeant, fought in the battle of New Orleans with the United States Army. Sold his plantation on Isle de Cyprès in 1850 and moved to New Orleans. Surveyor of Customs for port of Pontchartrain, from 1853 until his death. Arthur and Kernion, Old Families of Louisiana, 409-10.

inquiry after introducing myself, as is almost always the case at that particular time of day, "have you dined?" has a brick-drying shed, under which he can dry 30,000 at once, upon the "bearing-off-boards," put on slats fastened to posts. By this plan, he can have the shed filled with bricks at odd times through the summer, which may be burnt when ready. Owing to the very frequent showers in this country, brick making is a very "catching business," but by this plan, all that trouble and loss is obviated.

Mr. F's place is a short distance above the "convent," 1 in St. James' parish, which is a very imposing looking structure, or rather structures, neatly formed and where a large school is kept; and where all looks in a healthy, flourishing condition. This was a state-fostered institution, and is said to have cost near half a million of dollars.

Along the road, the small Creole places are thick as "three in a bed,"—all the tracts being 40 arpents deep, and the reluctance of old families to sell out, has caused divisions and subdivisions among heirs until the land is thrown into a shape almost worthless, as I have already mentioned. Fancy a farm three rods wide, and 480 rods deep, and if you like it here is a lot on 'em.

My entertainer at night was a French gentleman by the name of Ferry,2 where I found a small house well fur-

<sup>1</sup> Jefferson College at Convent, St. James Parish, incorporated February 28, 1831, by A. B. Roman, Valcour Aime, J. H. Shepard, and others, was the first institution in the state for the higher education of young men. It burned in 1842, was reopened, and again forced to close, in 1859, on account of debt. It was purchased by Aime for twenty thousand dollars, and reopened in 1861, under legislative charter. In 1864 it was purchased by the Marist Fathers, and prospered, remaining active until 1927 when it was discontinued. Fortier, Alcée, Louisiana . . . , 1:606-9 (Southern Historical Association, Atlanta, 1909).

<sup>2</sup> A. Ferry operated Bourbon sugar plantation, one of the larger plantations then using improved equipment. Champomier, Statement of the Sugar Crop Made in Louisiana, 1849; Pike, Coast-Directory; map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," in Cohen's New Orleans Directory, 1855, p. 328.

nished, standing separate from the dwelling, in which to lodge travellers, where all their wants are as well cared for as though it were in a hotel.

Among the beautiful plantations passed, was that of "Golden Grove," belonging to C. M. Shepherd, Esq., for which I would willingly exchange all my interest in the California golden groves, or "placers." The most of the interest of a visit to this splendid plantation, was lost by not meeting the owner, whose character as a planter and as a gentleman of taste and refinement, stands very high. A few miles below, is the plantation of Dr. Loughborough,<sup>2</sup> on the point, which, owing to the shape of the tract, as before mentioned, has no woodland, and where I saw the whole force of the estate at work "catching drift;" a job of no small amount upon a place making 500 hogsheads of sugar, as that alone would consume, at least, 2,000 cords of wood of the usual quality of drift. The process of catching drift is by sending out a skiff, which fastens a rope to a whole tree, perhaps, and a very large one too. sometimes, and towing the prize ashore. One end of a chain cable is made fast to it, and the other to a powerful capstan, turned by horses or mules. I say powerful, for I saw them snap the chain like threads, when getting hold of "an old settler," before they could get it upon the beach far enough to take off a cut, which is done, cut after cut, until they are able to pull out the remainder. seem a very precarious way of supplying a large plantation with fuel, and yet it is the only dependence of many.

<sup>&</sup>lt;sup>1</sup>The plantation of C. M. Shepherd was fifty miles above New Orleans, partly in St. James and partly in St. John the Baptist Parish. It was one of the largest sugar plantations in the state, and had the distinction of possessing two sugar houses. Champomier, op. cit.; Pike, op. cit.; map of Plantations on the Mississippi River; "Directory of the Planters of Louisiana and Mississippi," op. cit., 353.

<sup>&</sup>lt;sup>2</sup> Dr. J. H. Loughborough, operator of Esperance sugar plantation, in upper St. John the Baptist Parish, forty-six miles above New Orleans. Loughborough did not make use of the most modern equipment. *Ibid.*, 341; Champomier, op. cit.; Pike, op. cit.; map of Plantations on the Mississippi River.

Formerly, it was a tolerably easy method, but of late, there are so many hundreds of persons whose whole income is derived from this source, besides the great amount required by plantations, that the supply is hardly sufficient to meet the demand, and a great deal of very poor stuff is now caught with avidity, that, in those good old times of plenty, would have been despised.

On my way, I called on my old friend and acquaintance. David Adams. As is the general custom among the planters in the "rolling season," he eats and sleeps in the sugar house. I am well satisfied that the "Mayor of Pittsburg," who is a brother of Mr. Adams, did not enjoy a more pleasant dinner than was our sugar-house fare that day. Mr. A. says that he made 60 bushels of corn to the arpent upon one piece, this year, of a choice white kind, by manuring and deep plowing, which is three times the usual crop. His molasses cisterns are of cement, plastered directly upon the pit dug in the earth, which he thinks preferable to brick work. As he has had to catch or buy fuel, he has made a part of his crop this season, as an experiment, with Pittsburg coal, and is well satisfied with the result. He mixes a small portion of wood under his kettles with the coal, which he thinks should always be done. Out of the many planters and farmers, whose early life was spent in other pursuits and who afterwards made successful tillers of the soil, although mere book farmers, Mr. A. may justly be ranked.

Among other enterprising and improving Creole planters, Mons. Boudousquie,<sup>2</sup> below Mr. Adams', deserves

<sup>&</sup>lt;sup>1</sup> David Adams, owner of a sugar plantation forty-six miles above New Orleans, later known as New Hope. Used the most improved equipment. Map of *Plantations on the Mississippi River*; Champomier, *Statement of the Sugar Crop Made in Louisiana*, 1849; Pike, *Coast Directory*; "Directory of the Planters of Louisiana and Mississippi," in Cohen's *New Orleans Directory*, 1855, p. 313.

<sup>&</sup>lt;sup>2</sup> Antoine Boudousquie, owner of an extensive sugar plantation in St. John the Baptist Parish, known as Reserve. Used improved machinery. Boudousquie was born in New Orleans about 1803, graduated from the old University of New Orleans, served

mention, as does Mr. Felix Reine,<sup>1</sup> in whose garden I found a great abundance of very large and most delicious sweet oranges, which are rendered quite unsaleable, even at the low price of 40 cents a hundred, by the alarm of cholera in New Orleans, with the idea that indulgence in fruit is dangerous.

Mr. J. Gasset.<sup>2</sup> from Kentucky, at Bonnet-Carré Bend, with whom I spent a night, lives in the house built by the old Spanish Commandante, 70 years ago, which is still in a sound condition. It is built of red cypress, which is as much more durable than white, as is red cedar more durable than white cedar. Mr. G. has the first draining machine that I have met with. It is a steam engine and wheel which elevates the water five feet, and cost \$5,000. He has 600 acres in cultivation, ditched every half arpent (about 100 feet). The machine works on an average about three days a week, at an expense of 300 cords of wood a year, which is worth \$2 to \$3 a cord, and one hand to tend. If run constantly, it would drain 500 acres. Mr. G. has plenty of wood, but it is in a wet swamp and troublesome to get out. He has used green bagasse to boil sugar, as he thinks to advantage, by mixing it with half the usual quantity of wood. The cost of drainage would be greatly lessened, if a united interest could be brought

many years in the lower house of the state legislature, was a member of the Constitutional Convention of 1844-1845, and later served in the state senate. Although an old-line Whig, was elected by a Democratic constituency. "Brief Biographical Sketches of Members of the Convention," in New Orleans Daily Picayune, September 1, 1844; Louisiana House Journal, 1837-1844; Senate Journal, 1850; Journal of the Constitutional Convention of Louisiana, 1844-1845; "Directory of the Planters of Louisiana and Mississippi," op. cit., 318.

<sup>&</sup>lt;sup>1</sup> Felix Reine, probably a member of "Marin Reine & Co.," owners of a sugar plantation in St. John the Baptist Parish at Bonnet Carré Bend, thirty-nine miles above New Orleans. Used improved machinery. *Ibid.*, 350; Champomier, op. cit.; Pike, op. cit.; map of Plantations on the Mississippi River.

<sup>&</sup>lt;sup>2</sup> Probably J. Gosset, of Hollingsworth and Gosset, owners of a large sugar plantation on the east side of the Mississippi River at Bonnet Carré Bend. Pike, op. cit.

to systematize a great work of the kind. Time and increased value of the lands will bring this about, and make this "great swamp state," one of the gardens of the world. Canals will be made as common as in Holland, and a similar system adopted to get rid of the surplus water. More than half of the area of the state is susceptible of having a navigable canal made to pass through every plantation. When this is done, the draining machines would empty the canals, and keep the surface of land that is now ten or twelve feet below flood height of water in the Mississippi, in a perfectly dry and fit state of tillage, at a far less expense, per acre, than is now incurred by the imperfect individual system. "Union is strength," and that is the only kind that can control the floods of such a "great father of rivers," with so many obstreperous children.

SOLON ROBINSON.

New Orleans, Dec. 29th, 1848.

AGRICULTURAL TOUR SOUTH AND WEST.—No. 4

[January 12, 1849<sup>1</sup>]

MR. ROBINSON'S TOUR.—No. 8.
[New York American Agriculturist, 8:252-54; Aug., 1849]

[January 16, 1849]

Louisiana.—On my way down the coast, to-day, from Algiers, opposite New Orleans, I first saw cane planting. The ground, which had corn upon it last summer, was broken up with four yoke of oxen, and thrown into beds eight feet from centre to centre, and a furrow opened in these with a double plow, followed by a triangular block of wood, to press out all the lumps, and make a wide, smooth furrow, into which the canes were carefully laid in double rows, and lightly covered with hoes. A great abundance of cuttings are used to insure a good stand. It requires one acre of growing cane to plant five acres.

<sup>&</sup>lt;sup>1</sup> This article, written January 12, 1849, but covering Robinson's travels of December 9 to 15, 1848, is printed ante, 146 ff.

J. P. Benjamin, Esq., 18 miles below the city, has yet forty acres of cane to grind. He has a complete Relieux apparatus,<sup>2</sup> and all the appurtenances for making refined loaf sugar, direct from the cane. The refinery is under the direction of his brother, who is very successful in the business, and is making as good an article as ever need be called for. The expense of the refining apparatus was \$33,000. By this process, the sugar is not only increased in value, but five sixths of the molasses is used up; the remainder, that will not granulate, is sold as "sugarhouse molasses," which, though very thick and apparently good. is really the poorest molasses in market. The mass of it is the glucose of the cane, with just saccharine enough to sweeten it. I saw here, in operation, one of Bogardus' eccentric mills,3 to grind sugar, and another to grind corn; and both giving much satisfaction.

Mr. Stephen D. McCutchon plows his land with three mules, planting  $6\frac{1}{2}$  feet apart, and opens the planting furrow with a "fluke," instead of a three-cornered block. The fluke is a very large double moldboard, iron plow, drawn by two good mules. The moldboards are made of boiler iron,  $3\frac{1}{2}$  feet long. He cuts his cane for planting,

¹Judah Philip Benjamin, lawyer, statesman, planter. Born on St. Thomas Island, British West Indies, August 6, 1811. Removed to Charleston, South Carolina; thence to New Orleans. His plantation was called Bellechasse. Contributed articles on the chemistry of sugar to De Bow's Review, 1846 and 1848. Elected to state legislature, 1842; to United States Senate, 1852. Under the Confederacy held the offices of attorney general (1860), secretary of war (1861), and secretary of state (1862). At the close of the Civil War, fled to the West Indies and then to England, where he became one of the most celebrated lawyers in that country. Wrote numerous treatises on law. Died in Paris, May 6, 1884. Dictionary of American Biography, 2:181-86; Moody, Slavery on Louisiana Sugar Plantations, 43-44, 47, 50-51.

<sup>2</sup> Norbert Rillieux, of New Orleans, invented an apparatus for boiling sugar *in vacuo*. Its introduction to the Louisiana plantations is described in the *Annual Report of the Commissioner of Patents*, 1848, pp. 328 ff.

<sup>2</sup> "James Bogardus's Patent Eccentric Universal Mill," is described and illustrated in *ibid.*, 1845, pp. 1144-48.

all in pieces, two feet in length, being careful to strip off all leaves. He has, this year, manured 40 acres as an experiment. But he hauls his bagasse out upon the levee, and throws it away.

Myrtle Grove, the next plantation below, owned by Messrs. Trufant and White,1 use about half of their bagasse for fuel. Mr. Trufant told me he could make steam with bagasse easier than with wood or coal. This plantation has no timber land. All back of the narrow strip in cultivation, is wet prairie, and would be very rich if drained. They have a canal twenty-two feet wide, three feet deep, and three miles long, to lead water away from their steam-draining machine, by which only can the back part of the land, now in cultivation, be kept free from water, by an engine of 10-horse power. The water is lifted from two to four feet by a paddle wheel twenty feet in diameter. This works only one day a week, burning a cord and a half of wood, except in uncommon wet weather. The water, in the meantime, accumulates in the large leading ditch, on the back side of cultivated lands, two and a half miles long. Outside of these ditches. cattle are pastured on coarse prairie grass. The wood for this place has to be caught or bought, and is worth from \$2.50 to \$3 a cord. Coal is worth 20 cents per bushel. The cattle that run upon this prairie land, become almost amphibious. They are fat in summer, and live through winter. None but the native, or Spanish cattle, which are really a very fine breed, can stand such fare, particularly with ten musquitos to every spear of grass they fish up from its watery bed. The soil of this place is unusually light, but has had the cream taken off by exhausting crops, without any return. Messrs. T. and W. purchased

<sup>&</sup>lt;sup>1</sup> J. L. White and Seth Trufant, operators of one of the larger sugar plantations, which was equipped with the most improved machinery. Myrtle Grove was thirty-one miles below New Orleans in Plaquemines Parish. S. Trufant was also a commission merchant in New Orleans in 1849, located at 78 Magazine Street. Champomier, Statement of the Sugar Crop Made in Louisiana, 1849; Cohen's New Orleans and Lafayette Directory, 1849, p. 175.

the place last year, of Mr. Packwood, the elder, at \$225,-000, with all on it. There are 8,000 arpents of land, 700 in cultivation, 450 in cane last year, and 575 this year, balance corn. &c.: 139 slaves: 80 field hands: 55 working mules and horses: 50 oxen: 20 carts: 40 plows: 200 cattle. and a few sheep, but no hogs; good sugar house and machinery, with Relieux apparatus of three pans capable of making 12 to 14 hogsheads a day, or three hogsheads at a strike. The sugar house and machinery is valued at The other buildings are good; the negro houses \$50,000. built of brick, with elevated floors, 32 feet square, divided into four rooms, with chimney in the centre. There are twelve of these. The last crop was 700 hogsheads of clarified sugar, which usually sells, in hogsheads, from 5 to 6 cents per pound. The molasses will not probably exceed 20 gallons to the hogshead, if it does that.

The next place below Myrtle Grove, is that of Col. Maunsel White,<sup>2</sup> heretofore described in the Agriculturist, by R. L. Allen.<sup>3</sup> His front fence, some three miles long, is made of three boards, whitewashed, upon posts set in a bank, upon which is a hedge, or rather thick row of sour orange trees, many of them loaded with fruit glit-

<sup>1</sup> Samuel Packwood. Awarded a premium for the Rillieux process of loaf sugar and for the best rough sugar, 1846. American Agriculturist, 4:30 (1844); Southern Cultivator, 6:136 (September, 1848); De Bow's Review, 1:167 (February, 1846); 3:118 (February, 1847).

Colonel Maunsel White, of Deer Range plantation on the Mississippi River, thirty-six miles below New Orleans. In 1801 came to New Orleans from Ireland. State senator from Plaquemines Parish, 1846. Administrator of the state university. Established Chair of Commerce and Statistics. Fought under General Jackson in War of 1812. Stockholder in a cotton manufactory at Cannelton, Indiana. Aided W. J. Minor, a young Louisiana mechanic, in the perfecting of a steel plow. Discovered the fibrous value of okra as a possible substitute for hemp. Vice-president of Louisiana Agricultural and Mechanics' Association, 1847. Contributor to De Bow's Review, 1847-1848. American Agriculturist, 10:122 (April, 1851); Hunt's Merchants' Magazine and Commercial Review, 18:670 (June, 1848).

<sup>&</sup>lt;sup>3</sup> American Agriculturist, 6:175 (June, 1847).

tering through the handsomest foliage in the world. Col. White, as well as his next neighbor below, Robert A. Wilkinson,¹ and, in fact, nearly all the large planters on this part of the coast, have to use draining machines. The strip and tillable land is very narrow, though all the back lands might be drained at less expense, in the aggregate, than is now done to drain a small portion of each plantation. Such a system as is in operation in Holland, would soon make the swamps of Louisiana tillable, and bring many thousands of acres of the finest sugar lands in the world into use, which are now only fit for breeding alligators, musquitos, and fevers.

Mr. Wilkinson lifts his water five feet in an immense volume, say 1,000 gallons a minute. This drains 400 arpents. He has 1,000 arpents in the tract, 200 of which, in front, has elevation enough to drain by ditches, and the remainder by machinery. He designs to put the back lands in order for rice, using the same water that he lifts from his sugar land, to flood the rice fields, when needed.

Mr. W. believes that all these lands could be drained by windmill. His father, J. B. Wilkinson,<sup>2</sup> (son of the old General,) has lived here, on the adjoining place, twenty-eight years. The cane upon this plantation, and several others near, is as green as in summer. Mr. W. makes refined loaf sugar direct from it, by Relieux apparatus. So does Mr. George Johnson,<sup>3</sup> the next place below. Robert

¹ Robert Andrews Wilkinson, grandson of General James Wilkinson, born December 16, 1809; died August 30, 1862, at second battle of Manassas. In the forties, lived in Plaquemines Parish and maintained a summer home on the Island of Grand Terre. Contributor to De Bow's Review, 1847-1848. Louisiana Historical Quarterly, September 14, 1917, p. 165; Arthur and Kernion, Old Families in Louisiana, 393.

<sup>&</sup>lt;sup>2</sup> Joseph Biddle Wilkinson, born December 4, 1785; died November 8, 1865. *Ibid.*, 392.

<sup>&</sup>lt;sup>3</sup> George Johnson, owner of a fine plantation in the Plaquemines region, forty-two miles below New Orleans; in 1844 he produced there 530 hogsheads of sugar. Much of the Plaquemines region was extensively developed. *De Bow's Review*, 2:334 (November, 1846), 3:118, 258 (February and March, 1847).

A. Wilkinson makes refined, (hogshead,) sugar by Howard's vacuum pan; and Mr. Osgood, a few miles below, makes the same kind by vacuum pans from the Novelty Works. Mr. Osgood has greatly increased the product of his land by deep plowing, and the use of subsoil plows. abundant ditching, and manuring, at the rate of 100 cart loads to the arpent, with old rotten bagasse, stable manure, and pea vines. Having no wood, except drift, he saves bagasse for fuel, or else would make manure of it. as he has proved its value to be great when fully rotted. His front fence is two and a half miles long, nearly all formed with a hedge of Yucca gloriosa, called here. "Spanish bayonet," "Pete," and several other local names. Although rather ragged in appearance, and interrupted by sundry negro paths, it is a good fence. Mr. O. assures me that no animal, not even a hog, will attempt to go through one of these paths. The points of the leaves are so hard and sharp, that everything is afraid to come near it. It needs topping every year, and all the tops that fall between the rows are allowed to remain and grow, and those that fall outside must all be removed, or they will grow and increase the width of the hedge row two much. The annual trimming and growth of new plants every year, is the whole secret of keeping up these fences. When they are neglected, they soon become unsightly and inefficient. The first setting of the hedge is very easy, as it is done by cuttings slightly planted in two rows, about two feet apart, and ten or twelve inches from one to the other, set opposite to the spaces of the opposite row. After getting large enough to trim, say in three or four years, the spaces all fill up with new plants. I think it the best hedge plant for this climate and soil, that I know of. Mr. O., however, is about to try the bois d'arc, (Osage

¹Isaac Osgood, whose sugar estate was forty-five miles below New Orleans on the right side of the Mississippi River, had one of the most highly cultivated places in that district. In 1844 he produced 658 hogsheads of sugar. *Ibid.*, 2:334 (November, 1846), 3:118, 258 (February, March, 1847).

orange). I have no faith in his success, as it naturally grows to a tree.

To show what a little energy and determination may accomplish, in time of trouble, I wish to state that Mr. Osgood has an orangery the fruit of which he has just sold on the trees for \$550, besides making a very large reservation for himself and friends. But to the point. When all the orange trees were winter killed, in 1834-5, Mrs. Osgood, then living, immediately had the present orchard planted, the trees of which, as large as my body, and now 40 feet high, are loaded with most delicious-looking fruit. There are also an abundance of lemons here. too. So much for the active energy of woman, and determination to have an orchard, notwithstanding the loss of one set of trees. There are many other places where oranges are plenty, but many others where there are none. But very few persons think of growing them for sale.

Mr. Osgood once built a railroad through the centre of his plantation, which is long and narrow, to bring the cane to the sugar house; but, after a few years' trial, he found it did not pay cost, and pulled it all up, except from the sugar house to the river bank, and from the bagasse sheds to the sugar house. Although these railroad experiments continue to be tried by persons as sanguine in the belief of their advantage as was Mr. O., yet I have no doubt, that they will all follow suit. For the use of only six or eight weeks, when timber will not last over six or eight years, and when the cane has to be loaded into carts to be brought to the cars, however pretty the theory, the practice is not so perfect. A plank road would undoubtedly be better, and that would be expensive, unless the wonderful rapid decay of timber could be prevented.

Mr. Osgood is one of those who keeps sheep for somebody else to shear. He told me, that, a few years ago, he had no trouble in getting his sheep sheared. Every spring, one of them 'cute Yankees used to come along in his boat and shear the sheep and carry off the wool without any trouble. Yesterday, when I left Mr. Wilkinson's, he was still cutting cane, growing green as ever; though this is unusual.

January 16th, 1849.

Mr. Robinson's Tour.—No. 9.

[New York American Agriculturist, 8:283-84; Sep., 1849]

[January 24, 1849]

Louisiana.—There are a good many small rice farms along this coast of the river, on which the seed is usually sown broadcast, in March or April, and flooded in June or July, three or four inches deep, if the state of the river admits: and if it does not, it grows dry, as there is not energy enough in the Creole population, who plant rice, ever to fix any kind of machinery to elevate water to flood the rice fields. Mr. Andrew Knox. a very intelligent gentleman, with whom I spent a night, is of opinion that all of the back lands might be very profitably cultivated in rice, by using windmills to drain the land, and the same cheap power to flood the fields, when needed. Some plant in drills, and cultivate with plow and hoe. This produces the best crop, but requires labor, which is very objectionable among "white folks." The rice sown broadcast has to be wed with sharp hoes or knives. The crop is cut and stacked like wheat, in September, and is threshed, or trodden out, now and then. It is sometimes winnowed with a fanning mill, but oftener with a blanket, some-

<sup>1</sup>It was customary for most of the sugar planters on the lower Mississippi to produce some rice and the majority of sugar planters in the state also grew corn for consumption on their plantations.

<sup>&</sup>lt;sup>2</sup> Andrew Knox, owner and operator of New Hope sugar plantation in Plaquemines Parish, nineteen miles below New Orleans, on the west side of the Mississippi River. Used the most improved equipment. New Hope was later owned by W. and H. Stackhouse, one of the largest sugar producing firms in the state. "Directory of the Planters of Louisiana and Mississippi," in Cohen's New Orleans Directory, 1855, p. 338; Champomier, Statement of the Sugar Crop Made in Louisiana, 1857-1858, 1859-1860, 1861-1862.

what after the manner of the old Dutch fan. The hulling machines are equally primitive. A mortar and pestle being the most common. An average crop is about 30 bushels of paddy to the acre, weighing 60 lbs. to the bushel; and is worth about 75 cents a bushel, or  $2\frac{1}{2}$  cents per pound, clean.

Four years ago, Mr. K. bought 1,240 arpents, for \$2,100. without fence or buildings—an old-field pasture—340 arpents cleared land-700 tillable-800 now in wood. It cost him \$20,000 and one year's labor with 35 hands, (except making a small crop of corn,) to get ready to make sugar. But he has so renovated the old fields, that he made last crop, from 240 arpents of cane rolled, 325 hogsheads of sugar, and the unusual quantity of 85 gallons of molasses to the hogshead, (27,625 gallons,) worth 18 cents a gallon, and sugar four cents per pound will make \$15,210, while the value of the place has increased so, that, compared with late sales in the vicinity, it is worth \$100,000. This is certainly much better than letting such land lie an idle waste. His annual expenses are about \$6,000, as he buys nearly all his corn, as well as meat. He works 24 mules and 6 voke of oxen, and uses good tools. Notwithstanding he has plenty of timber, he has ordered wire to fence his front, because he thinks it will be the cheapest. Cypress pickets, or rails, for post and rail fence, with which nearly all fences are built, are worth from \$5 to \$7 a hundred, and posts \$10, and will not last over ten years. So that it is easy to see that wire is the cheapest. I am glad to perceive that Messrs. Allens are prepared to furnish it to order in any quantity; as I think that, as soon as its value and cheapness as a fence becomes known, the whole coast will be fenced with it.

To show what judiciously-applied labor is capable of producing, I will state a few facts relative to the plantation of Mr. Wm. Polk, a very enterprising and intelligent young man, from Tenessee, whose place is about 24 miles above New Orleans, on the "west coast." He bought

the tract about four years ago—an old Spanish grant of some 7,000 arpents, running back near nine miles. much of it on a ridge, upon which cattle can be enclosed by a wire fence, back of the cultivated lands. Upon this tract, he intends to put a large stock of cattle, that will live upon the cane. He found upon the place an old dwelling, the shingles of which, though still sound and nailed with wrought nails, attest its age. There were about 310 arpents of cleared land, part in rice field, and balance old-field pasture, with but one ditch upon the place, the whole not worth the annual taxes. In 1846, he broke up the land deep, with four and six mules, by incredible hard work, and planted corn, and made about half a crop; which some of his neighbors said was because he plowed his land so deep that he had spoiled it. But he said, it was because it never had been plowed so deep before, and could not be expected at first to produce so well: and, secondly, because he had not vet got it perfectly ditched. In the winter of 1846-7, he gave it another thorough plowing, planted cane, and completed the ditches, laying it into squares six rods on a side, having a fall of twelve feet in 105 arpents back from the river. The next crop made him 445 hogsheads of sugar, besides seed cane. In 1848, he had 320 arpents in cane, 285 of which he rolled, and made 525 hogsheads of sugar, and about 36,000 gallons of molasses, working 55 field hands, (90 negroes in all,) 37 mules, 10 carts, 3 wagons, 14 double plows, and no oxen. His sugar house cost \$17,000, besides the labor of his own hands making brick and doing most of the work, estimated at \$9,000 more. Much of the worst of the ditching was done by hired Irish laborers. He feeds his field hands 6 lbs, of pork and 12 quarts of Indian meal a week, besides molasses, sweet potatoes, and other vegetables; and, although they were from the north, he finds that they keep healthy and strong upon this high feeding, without complaining of lassitude, as is usual among those brought here while acclimating.

He confidently expects to derive a profit from grazing

cattle upon his extensive back lands, and selling them for beef at New Orleans. Some of those who thought he was "spoiling his land by plowing it so deep," now look with wonder upon his success. There are several persons above Mr. P., who turn their whole attention to raising cattle; and, in the course of my drive, I saw, at one place, a very unusual appendage to the cattle yard. It was a well-constructed rack. I also saw a good many hogs, and some of them as mean as well could be conceived of.

Upon Mr. Thomas Maye's¹ place, I saw the effects produced by a large crevasse some 40 years ago. The whole surface, where it run, is in ridges, some of them six feet high, made by deposit of the earth carried in solution in the river water. This is so great that it has been thought practicable, by some persons, to fill up the swamp back of New Orleans, by letting the river flow through it, which is to be done by confining it within proper bounds.

Mr. M. lost his sugar house and 160 hogsheads of sugar by fire last fall, from sparks falling upon the dry roof. To prevent similar accidents, let a small pipe be attached to the force pump and carried up and along the ridge of the roof, letting out little jets of water every few feet. This simple and cheap plan would have kept the roof wet all the time, and prevented the present great danger, as well as several others, which have occurred heretofore, and are likely to occur again. I do not think the expense would exceed \$25, which might soon be saved in insurance.

Blackberries, plums, and peaches, are now in bloom; Indian corn is planting; and oats about three inches high. The latter will be good to cut green in March, or for seed in May. Corn is planted from January till May. Figs grow so abundantly upon Mr. Maye's place, that his negroes have all they can eat, which he considers very healthy.

<sup>&</sup>lt;sup>1</sup> Thomas May, owner of a modest sugar plantation in St. John the Baptist Parish, on the west side of the Mississippi River, forty-one miles above New Orleans. Used improved machinery. Champomier, op. cit., 1849; Pike, Coast-Directory.

The style of dwellings here is a story and a half—the half one at the bottom—though sometimes it is high enough for use and is paved with marble or tiles—a front and back gallery, often all around—all the doors and windows just alike; that is, two inner doors opening from the centre the upper half glass, and two outer ones of wood, hung with great wrought-iron hinges big enough for a door 16 feet wide, instead of 16 inches, fastened with large iron hooks.

In warm weather the whole are open and a curtain fills the space. One of the handsomest and most luxurious gardens that I noticed, is that of Valcour Amie, who is also one of the largest planters, and makes refined loaf sugar. His house is more modern and splendid.

The entrance of the houses here is nearly in front. You drive in upon one side of the garden and into the back yard, among a general assortment of chickens, young negroes, turkeys, ducks, and dogs.

Governor Roman's<sup>2</sup> garden is another enchanting spot. Judicious taste, skill, wealth and climate combined,

<sup>1</sup> Valcour Aime, born in St. Charles Parish, Louisiana, 1798; died December 31, 1867. Acquired a plantation in St. James Parish above New Orleans. Married Josephine Roman, sister of Governor Roman. Sugar was first refined in the United States on Aime's plantation and under his supervision. Experimented widely with sugar refining machinery. His house was known as "The Little Versailles." See sketch in Dictionary of American Biography, 1:130. For discussion of his plantation operations, see Moody, Slavery on Louisiana Sugar Plantations, 43, 45, 47, 52, 55, 57, 64, 75, 82-84, 87-88, 104.

<sup>2</sup> André Bienvenu Roman, born in St. Landry Parish, Louisiana, March 5, 1795; died at New Orleans, January 28, 1866. Early taken to St. James Parish, where his father established a sugar plantation. Later owned his own plantation in the same district. Served for many years in Louisiana House of Representatives. Governor, 1831-1835, 1839-1843. Subscribed to and sponsored Jefferson College in St. James Parish. President of Louisiana State Agricultural Society. Opposed disunion, but yielded to the majority. See sketch in *Dictionary of American Biography*, 16:125-26; "A. B. Roman, of Louisiana, Agriculturist," in *De Bow's Review*, 11: facing 350, 436-43 (October, 1851). For discussion of his treatment of slaves, see Moody, op. cit., 21, 45-46, 73, 75, 86, 89.

makes a scene here, which, if it could be exhibited in January in New York, would command a world of admiration.

Mr. James M. Lapice<sup>1</sup> is a large planter, who also refines all his juice into loaf sugar. &c. He is the only one that I know of, who regrinds his bagasse in a separate mill. He has two three-roller mills, set 12 feet apart, with a carrier between, so arranged as to reverse the position of the bagasse, in order that it may enter the mill in a different manner from that which it came through the other rollers. By this process, he gets about 75 of the 90 per cent. of juice contained in the cane, and makes bagasse so free of saccharine matter, that the acidity arising in the decomposition is not great enough to injure the land to which it is immediately applied. It is ground, or broken up much finer than the common bagasse, and is spread out about six inches thick, at once, upon cane stubble that is to be broken up. This serves to keep the land loose and mellow. This method is the same as that practiced upon grass, &c., called "Guerneyism." In the spring, he sends the hoe hands to rake off the top of old cane rows, and plant a hill of peas every 12 or 15 These grow and cover over the ground completely, and the next winter, together with the now-rotten bagasse, are turned under with a heavy plow and planted again in cane, and produce a crop greatly increased in value. This process also serves to keep down the coco, in consequence of being so smothered a whole year, that the cane gets up and ahead of it, and then keeps ahead. Mr. Lapice's rule, in relation to team, is different from most planters. He works 120 hands in the field and 120 mules or horses, besides 40 oxen, or one mule or horse to every hand, and never works them but half a day at once.

¹ Probably intended for Peter M. Lapice, mentioned in 1846 as one of the sugar planters who had abandoned kettles, either in whole or in part, in favor of more modern refining equipment. One of the foremost planters in using improved processes for the manufacture of sugar. De Bow's Review, 2:333, 334, 341 (November, 1846); 5:250, 257, 287 (March, 1848); 11:42 (July, 1851).

The set that go out in the morning, are brought up at noon and turned into a pasture, of which he has 600 arpents, and a new set are all ready in the stable, having been previously fed, to go to work in the afternoon. At night, those at pasture are taken into stable and fed ready for morning and the others turned out. Thus they are never fed hot, but eat less corn, and are less sick, wear longer, and can be driven harder, while at work. He makes and uses 18,000 bushels of corn a year; has in use 100 plows; 20 large iron-axle carts, with brass boxes. Average crop of sugar about one million pounds.

January 24th, 1849.

HIGH WATER IN THE LOWER MISSISSIPPI—PROSPECT OF AN OVERFLOW—PRESENT SUGAR CROP—EFFECT OF HIGH WATER UPON THE NEXT CROP, &C IN A LETTER FROM AN OLD CORRESPONDENT OF THE GAZETTE.

[Daily Cincinnati Gazette, February 28, 1849]

PLAQUEMINE, La., Feb. 11th, 1849.

Messrs. Editors: I am shut up—cabin'd—crib'd—confined—i. e. I am located just here while it may please heaven to grant a cessation to this outflowing, down tumbling, two days shower. Thank fortune though, all the rain that falls here in these lower regions, dont raise the river any, because unlike any other christian country, water dont run into the river hereabouts, but runs out of it. And unless you "up-country folks" soon cease to send down your floods, wo be to this devoted land. What a satisfaction it would be now, if we were all assured that we were born to be hung, for then we should feel safe; whereas the drowning prospect is just now much the strongest.

The river has been continually rising all winter. Three or four weeks ago I was on the coast below the city and they then had as much water as they knew what to do with, but being satisfied that it could not rise any higher,

no great efforts were making to raise the levee, but only to strengthen it in weak spots.

They must now be in trouble there. I came up the west coast two weeks ago, and many were getting alarmed and began to talk of building higher, but were satisfied that the river could not rise any higher at this time of the year and so they kept quiet. But it has risen from one to two feet since.

On Bayou Lafouche, there are some very bad crevasses, and a week ago the prevailing idea was that the river *must* stop rising, for they could not stand any more water.

Every steamboat throwed the water over the levee, which in places is twelve feet high, and hundreds of hands were at work preparing for "possibly an inch or two more." It has risen six inches since and is rising about two inches in 24 hours now.

What is to be the end, no man knoweth. It is utterly impossible to stand another foot, and yet the prospect is strong that it is coming. It is already as high as '44 and within a few inches of the great flood of '28. And then the water had a chance to spread over many miles of the coast above, which is now guarded by one continuous levee.

There can be no doubt that a most disastrous ovorflow of hundreds of sugar plantations, in all human reason, must occur within a few days. A rise of a few inches more, or a storm of wind, will be almost certain to open many a weak spot and overflow miles of levee that is too low.

The incessant rain and mud of yesterday and to-day prevents working upon places where there is the greatest need of it. The water is within a few inches of the top at this place, the waves of steamboats throw over the water into the street, and if the whole town is not from three to five feet under water within a week, I shall wonder. The alarm along the coast now is great, but not unreasonably so. Exposure to water too, produces the pre-

monitory symtoms of cholera, which is not yet quite dead.

What an unfortunate year for planters. Short crops, low prices, cholera and flood. Add to that the seed cane which should now all be planted, cannot be on account of workikg on the levee, and on account of the rain, and it is decaying faster than ever was known before. Many planters will not be able to plant much more than half the number of acres intended, on account of bad seed.

I have visited nearly all the plantations below Baton Rouge, and I am satisfied that the crop is not over three quarters as much as it was last year. But the quality is superior. The yield of that will average about 60 gallons to the hogshead of sugar. Owing to the unusual warm winter, much of the molasses will be very much opposed to slavery, and will be making constant efforts to escape—from the barrels.

Buyers will do well to get it up before warm weather. It is already fermenting in some cisterns.

What effect the present state of things should have upon prices of sugar and molasses is for dealers in the article to determine. A general overflow will destroy much of the present crop, as it is nearly all in the purgeries and in the present state of weather and water, cannot well be shipped from most places. Of course an overflow would destroy growing crops.

In stating the crop as a quarter short, however, it must be taken into account that there are a good many new sugar plantations, that made a crop last year.

I am told that Niles & Co., of your place, put up sixtyeight mills last season, and Goodloe sixteen. Pray ascertain this fact. If so, I would count all the new mills at one hundred which would give very soon that number of new places—for whereever a horse mill was taken down it was set up again on some other place.

The winter here has been just no winter at all. The peach blossoms are now gladening the eye beneath my window as I write. Garden vegetables and flowers have been abundant at all times, and strawberries I have re-

ported heretofore as growing in the open ground ripe the middle of January.

Below New Orleans are some of the most beautiful orange groves imaginable; where I wandered amid bushels of fallen and rotting fruit of the most delicious kind, during "cholera times," all untasted and unheeded.

By the bye, I took a small touch of that same cholera myself. It didn't kill me, though. It's nothing when you get used to it.

This town, Plaguemine, is situated upon the point where the bayou of that name leaves the river. It contains some seven or eight hundred inhabitants, and what is very unusual in this country, a pretty fair quality of a tavern in the "Planters' Hotel," and for aught I know, one or two other of the same kind.

This bayou is the gate to the Attakapas country, and thitherward, at this time, goeth much water and many steamboats.

Speeking of steamboats, there has upwards of thirty of them passed this point within the last ten hours. Some of those downward bound are loaded with cotton down to the guards, and a leetle below. And lest I should load your columns at the same rate, I will just belay here.

Yours, &c.

Agriculturist."

SOLON ROBINSON, "Travelling Correspondent of the American

FROST AND SNOW AT NEW ORLEANS.

[New York American Agriculturist, 8:125-26; Apr., 1849]

[February 16, 1849]

LAST night was one of the most severe that has been experienced here since March, 1833, when all the orange trees on the coast of the Mississippi were killed. The same calamity has undoubtedly befallen them now. Day before yesterday was very mild and pleasant. No fires were needed. In the night, the wind came out north, and yesterday forenoon was clear and cold. I was on board a steamer below Baton Rouge, in the afternoon. About sundown, it commenced a severe storm of rain, sleet, hail, and snow. It continued at intervals till midnight. In the morning, the decks were coated with ice, and the ground whitened with snow; the trees glittering in the sunshine, and roses and oranges all encased in ice. Oh! what a brilliant scene! But it is a scene of distress. Early corn, beans, peas, tomatoes, peppers, &c., &c., that were growing so finely, are all killed.

Since arriving in the city, I find now, (5 o'clock in the evening,) snow and ice still upon shaded roofs and yards. It will freeze again to night. This is another calamity to this already overburthened land. The river never was known so high at this season of the year. In several places above us, the levee is broken and towns and plantations are overflowed. New Orleans is about a little, as yet, safe from the overflow. Many places have not six inches of levee to spare.

Solon Robinson.

New Orleans, Feb. 16th, 1849.

## MR. ROBINSON'S TOUR.—No. 10.

[New York American Agriculturist, 8:314-16; Oct., 1849]

[February ?, 1849]

Using Bagasse for Manure.—Mr. Lapice, whom my readers will recollect we parted with last month, has found great advantage in using bagasse as manure. He grinds it through a second mill, which makes it dry and fine, and it is then spread directly upon cane stubble, where it is suffered to lie a year, and then plowed in, together with a pea crop which he plants upon the ridges, in May, and from which he derives great advantage not only as a manure, but by the shade, which greatly assists to kill the coco.

Upon Col. Manning's place, five miles below Donald-sonville, Mr. Havvin, his overseer, told me that he manured 75 acres last year, with rotten bagasse, which dou-

bled the crop. Mr. L. and Col. M. both use lime, and pen their cattle upon the bagasse pile to rot it. This does it in two years effectually. Mr. Havvin plants cane seven feet apart, but thinks six feet would be better upon old land so set with coco as this place is, as it sooner shades the ground, which is the most effectual thing to overcome this great pest of the planters. There are 850 arpents in cultivation upon this place. The regular crop is 250 arpents of cane plant; 250 of cotton; 350 of corn; and the working force about 80 full hands, and 40 mules and horses.

Donaldsonville is about 80 miles above New Orleans, and is situated upon the point between the river and Bayou La Fourche, which is a fork, as the name implies, or outlet, running out at a right angle, nearly, and is some 250 feet wide at high water, and 25 feet deep; but 60 feet wide and 2 feet deep at low water. The distance to the mouth of the bayou is about 100 miles, while by the river it is double that, and the two mouths are about 50 miles apart.

Burning Bagasse.—Below Donaldsonville, Mr. Ford¹ has a new bagasse chimney, 40 feet high, at a cost of only \$80, which he alleges is built upon a new principle; and its cheapness is certainly well worthy the attention of all who are still disposed to practice this method of destroying a valuable article for manure.

Mr. Ford's boiler flue is conducted into the same chimney, and it is his opinion that with two 60-foot boilers, the burning of the bagasse would make nearly steam enough to grind and boil the crop.

Value of Land on Bayou La Fourche.—Mr. Sherrod Sparks,<sup>2</sup> 14 miles below Donaldsonville, sold his place, last

¹ Probably one of the firm of John Belson and Ford, who began the cultivation of sugar about 1846, on Bayou Lafourche, twentythree miles below Donaldsonville. Champomier, Statement of the Sugar Crop Made in Louisiana, 1845-1846.

<sup>2</sup> Probably of the firm of Sparks and Brandeguy, owners of a plantation in Assumption Parish on Bayou Lafourche, fifteen miles below Donaldsonville. In 1845-1846 they produced 425 hogsheads of sugar, an unusually large output for that time. *Ibid*.

winter, for \$20,000, containing 600 arpents, without stock or tools—300 arpents in cultivation, with sugar house and engine and two moderate dwelling houses, with other buildings. The place made 100 hogsheads of sugar last year and 110 the year before, with plenty of corn. The corn on hand sold with the place. The price of an adjoining place is \$20,000 for 370 arpents. A general average price of sugar lands is \$50 an arpent, including improvements.

Thomas Pugh's Plantation.¹—This is one of the best in the state. Not the largest, though quite enough so to satisfy any man of moderate desires, as the value of the annual crop is from \$30,000 to \$40,000. Mr. P. owns here about 3,000 arpents—1,000 cleared, 550 in cane, 250 in corn, and 200 in pasture, yards, gardens, &c. Of the first-named crop, 440 arpents made 700 hogsheads of sugar, and about 60 gallons of molasses to the hogshead. The remainder of the cane was reserved for seed planting. One acre of cane is required to plant five acres. Mr. P. has 100 working hands, producing about seven hogsheads of sugar to each. But this is not all profit, for the annual expenses upon sugar plantations generally, will average about \$100 to the hand.

As this amount will appear so enormous to some of my readers, let me give the items upon this place last year:-

Wages of overseer per annum,\$ " engineer, tending sawmill and sugar	1,200.00
house,	700.00
Average annual outlay for mules,	1,000.00
" to keep up supply of	
plows, carts, wagons, spades, hoes, chains,	
harness, nails, iron for blacksmith shop, &c.,	1,000.00
Average annual outlay for repairs of engines,	
mills, and kettles,	200.00

¹Thomas Pugh of Madewood plantation beyond Napoleonville. His splendid house, still in a fine state of preservation, was built in 1846. In 1929 the owners were Mr. and Mrs. Robert L. Baker. Saxon, Old Louisiana, 341. Spratling and Scott, Old Plantation Houses in Louisiana, 81-82, give the name as "Maidwood."

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Shoes, (from the bills of 1848,)	475.00
Cotton cloth, for clothing hands,	800.00
Woolen " " "	444.00
Woolen blankets,	200.00
225 barrels of mess pork, at average of \$10,	2,250.00
50 barrels of flour, (one to each family at	
Christmas,)	225.00
Hoop poles, for sugar and molasses casks,	200.00
Oil for sugar house,	175.00
Physician's bill and medicines, (\$1.75 a head,)	350.00
Taxes and other incidental expenses for sun-	
dries unenumerated,	200.00
The interest upon the estimated value of the	
plantation and all upon it, would be, at 8 per	
cent,	16,501.20
	25 920 20

25,920.20

Nothing for family expenses is included in the above estimates.

Mr. Pugh has been upon this place 24 years, and never bought corn but one year. His average yield per acre upon new land is thirty bushels. And that is double the usual average of the state, I think. The quality of his soil is above the average. Next to the bayou it is considerably sandy, but grows more stiff as we go back toward the swamp.

The estimated value of this plantation is as follows:— 1,600 arpents of land, (1,000 cultivated and 600 timber,) at \$50.....\$ 80,000 1,400 arpents back lands, (cypress swamp,) cost \$1.25 ..... 1,750 The mansion house being a new one is estimated at cost over and above the ordinary value of 30,000 land, ....... 80,400 201 negroes, at average of \$400 each,..... 60 farm mules and horses, at average of \$100 6,000

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6 yoke of oxen, \$40 a yoke,	240
Other stock and moveables, say	1,000
16 carts at \$50 each, and 1 wagon \$75,	875
Plows and other tools, say	2,000
The stock of corn for use in crib, 10,000 bushels	
at 40 cts	4,000

\$ 206,265

To show that the estimate for clothing and provisions is not too high, I will give the regular allowance to each adult, which is as follows:—4 cotton shirts; 2 cotton pants; 1 cotton jacket; 1 woolen jacket; 1 pair of woolen pants; 1 wool hat; 1 straw hat; 1 blanket; 3 pair of shoes; 2 woolen shirts (to a part only); a calico dress and hand-kerchief extra to each woman and girl, besides clothing for house servants. All the clothing is cut and made under the superintendence of Mrs. Pugh, who, at least, is one southern woman that "knoweth the way of her own household."

I will now give the feeding rations of this plantation, just to show that these laborers are not starved. Some plantations feed even higher, but the average is a little less. Every name upon the working list draws a peck and a half of good, sweet corn meal a week, and five and a quarter pounds of mess pork, besides vegetables. Then all children are fed separately. Besides, a barrel of molasses is dealt out every week, and a barrel of flour to each family at Christmas. Rations of fresh meat are occasionally given.

Mr. Pugh's overseer is a well-bred Yankee carpenter, by the name of Munson, from New Haven, Connecticut. And I wish here to remark, that I believe there is a rapid improvement going on in the character of this important class of persons to all southern planters. Educated and better men than formerly are employed, very much to the advantage of all concerned.

The buildings on this plantation are well worthy the attention of other planters desiring to make improve-

ments. The mansion is not the most showy, but is one of the most commodious and excellent dwellings in the state. The main building, 60 by 68 feet, is two stories, the wings only one, and yet there are 600,000 bricks in the walls.

Next in importance to the dwelling, and upon nearly all plantations, exceeding it, is the sugar house. Mr. Pugh's is 40 by 340 feet, with an extensive cane shed at one end, laid with iron rails, for cars to bring up the cane from where the carts drop it, to the cane carrier, which elevates it about fifteen feet to the mill, from which the bagasse falls into carts, and the juice runs to the vats, where it is cleansed by the "Spansenburg process," and thence runs to the kettles; thence to the coolers, and from there the sugar is carried upon railroad cars along lines of rails between the rows of hogsheads to the farther end of the building.

In a country where labor-saving machinery is so rarely seen, the excellent arrangements here are more worthy of attention.

Then, again, at the stable, we find another railroad labor-saving contrivance, that might well be copied by nine hundred and ninety-nine other planters. The stable is 40 by 230 feet, divided into 62 stalls, each seven feet wide. The mules all stand with their heads to the centre passage, seven feet wide, through which a railroad car brings corn and fodder from the corn house annexed at one end, and the animals are fed with a very small amount of labor. Behind the mules, upon each side, there is a good passage way, and each animal soon learns to know his place, where he is fastened by a broad strap around the neck, and a stout chain made fast to the stall so that it is always there. All the feeding is done by one careful hand, who is held responsible that everything appertaining to the stable is as it should be. This is a much better arrangement than trusting every Tom, Dick, and Harry, to feed the animal he has been using; and just a trifle superior to the very common practice of turning horses and mules all together into "the lot," to eat corn and fodder all from one trough, and at the same time keep up a constant fight over it. For it is the truth that many a plantation has not a stable upon it. This is perhaps more the case in Mississippi than in Louisiana. But there are plenty of planters in both states who might profit by a visit to Mr. Thomas Pugh.

## Mr. Robinson's Tour.—No. 11.

[New York American Agriculturist, 8:337-38; Nov., 1849]

[February ?, 1849]

Visit to the Plantation of Bishop Polk.¹—This is situated upon the right bank of the bayou Lafourche, about a mile above Thibodaux, and contains 2,500 arpents, 1,000 or 1,100 of which are in cultivation, and a portion of the rest cultivable. Of this, 600 arpents were in cane last year—358 used for sugar, and balance for planting cane, it being the bishop's intention, this year, to have 800 arpents. Whether he will succeed in getting that amount in, I cannot say; but I learn that the terrible ravages of cholera upon his place, which carried off above 70 of his people, has seriously injured his growing crop. From the 358 arpents last year, he made 510 hogsheads of sugar, and the usual quantity of molasses. The year before, he made from 470 arpents, 720 hogsheads. His usual crop of corn is about 200 arpents.

When I was on the place, Bishop P.'s people numbered 370; but the effective force of field hands was not more than one third of that number, owing to the fact that the stock is a very old one, and has been in the same family,

¹ Leonidas Polk, born at Raleigh, North Carolina, April 10, 1806; killed at Pine Mountain, June, 1864. Educated at West Point Military Academy and Virginia Theological Seminary. Became bishop of Louisiana, 1841. Conducted his sugar plantation with particular concern for welfare of slaves. Active in establishing the University of the South, at Sewanee, Tennessee. Major general and lieutenant general in the Confederate Army. See sketch in Dictionary of American Biography, 15:39-40.

(that of Mrs. P.'s ancestors, in North Carolina,) ever since the year 1697. Now, he has upwards of 30 entirely superannuated. There are, also, or were, at that time, upwards of 70 children under ten years of age. What a host to feed and clothe, and all to be looked after and provided for by the care of one man! Quite enough to frighten a New-England farmer.

The bishop is an experimenting and improving planter. He believes in good tillage and manure. He has one of the best fluke plows, made upon the place, that I have seen anywhere. The beam is 5½ feet long, 17 inches high—the handles fastened to the sides of the beam, and supported by a standard down to the centre bar, which bar is 29 inches long. The moldboards are 10 inches high, and 27 inches apart behind, and are made of wrought iron. He tried an experiment, last year, of stripping the cane of leaves, to give it a better opportunity to mature, and thinks he found his account in the experiment largely in his favor. At any rate, he obtained upwards of 21 hogsheads of good sugar from seven acres, which was a much larger yield than any other acres gave. The stripping was done by children. whose labor was not of much value at that season for any other purpose; and even if it had been valuable, he thinks that the labor was not lost, because the work of the cane cutters was greatly facilitated. I forgot to inquire whether he used the leaves for fodder. The cane experimented upon, was first-year rattoons. It is needless to say that it was good, independent of the stripping.

The bishop also tried an experiment, last season, to ascertain the quantity of juice obtained. He weighed 2,300 pounds of cane, which gave 163 gallens of juice, weighing  $8\frac{1}{2}$  lbs. to the gallon. He then reground the bagasse, and got 5 gallons more. Another experiment gave 67 lbs. of juice to 100 lbs. of cane. To do this, the mill must be first rate.

Bishop P. has made an improvement upon his mill that I like. Instead of elevating the cane on the carrier, so

as to pitch it down into the mill, he brings it up to a level, and there it is seized upon by two rollers that feed it to the mill in a very regular manner. All the bagasse is put in a pile to rot, for manure, as he is satisfied that, however rich the soil may be at first, manure will be of great advantage after a few years.

The amount of team required upon this place, besides oxen, is about 75 mules or horses, the latter being preferred. Upon this point, there is great difference of opinion. Many contend that, as horses only cost about half as much as mules, will do more work, and live nearly as long, that it is economy to use them.

The annual expenses of this plantation average about \$8.000; and yet, they make a full supply of corn and hav. and manufacture almost everything that can be done upon the place. The wool and cotton are purchased in the bale, and cloth is spun and wove by the feeble portion of the people. Carts, wagons, plows, spades, hoes, &c., are all made upon the place. So are the shoes. But there is half a pound of pork for every mouth, every day, to be paid for, which swells the amount; but it is the intention of the bishop to try hard to obviate this by raising his own hogs. This is an experiment I doubt the policy of. The difficulty of curing pork in this climate, is one objection, but the main one is, that the labor bestowed upon cane, instead of corn, will buy more pork than the corn will fatten. Then why try to make it? I also doubt the policy, upon most plantations, of manufacturing cloth: though the bishop says that his is spun and woven by old people, and by mothers, just before and after giving birth to children, and by invalids, or convalescents, who are unable to go to the field. The whole business of manufacturing of the materials and clothing all the people, is in the hands of one negro, who receives a certain number of bales of wool and cotton, and therefrom provides all the clothes required by the people, without ever troubling his master, or overseer, about the matter.

It is worthy of note here, that all labor ceases upon

this plantation, even during the rolling season, upon the Sabbath. As the bishop himself is necessarily absent much of the time, he employs a curate, who preaches to his people, every Sunday, and conducts a large Sabbath school, and performs all the marriage and sepulture rites required. About one third of the whole number are members of the church, and are as consistent Christians as are usually found in any community.

The average yield of corn upon this place, is about 26 bushels to the acre, and the amount required for plantation use, about 11,000 bushels.

Mr. Botner, the very intelligent overseer, is of the opinion that green bagasse injures land; but when rotten, is the best manure in the world.

He is also of the opinion that subsoil plowing won't pay cost. In this, of course we differ. But I give opinions as I find them, for what they are worth, for the use of others. He uses the "Beranger plow," but thinks the "Jacob plow" the best of any ever tried in stiff land. He also thinks the "sidehill plow" one of the most laborsaving kind of tools in plowing back ditch banks. Much of the land in cultivation is newly cleared, and, of course, full of vegetable matter. Upon this, he thinks it absolutely necessary to burn the cane leaves and tops, as it would be very troublesome to attempt to plow them under, and would be of no real benefit. The distance apart of cane rows, upon this place, is eight feet.

I am not willing to close the sketch of my visit to this place, without bearing testimony to the high character, both as a gentleman, an improving agriculturist, and a kind master to those whom Providence has placed him in charge of, which is universally accorded to Bishop Polk. As to his most excellent wife, she is certainly such a one as a great many planters' ladies might well imitate.

#### RECIPES FOR THE LADIES.

[New York American Agriculturist, 8:161; May, 1849]

[March 25, 1849]

I HOPE my dear friends will not imagine for a moment that I neglect their interests while taking notes. Here is proof that I am still mindful to pick up all little items like the following for future use:—

Louisiana Muffin Bread.—Take two pints of flour and one and one half of sifted cornmeal, two spoonfuls of butter, one spoonful of yeast, and two eggs, and mix and bake for breakfast. It is good.

Hopping Johnny (jambalaya).—Take a dressed chicken, or full-grown fowl, if not old, and cut all the flesh into small pieces, with a sharp knife. Put this into an iron pot, with a large spoonful of butter and one onion chopped fine; steep and stir it till it is brown; then add water enough to cover it, and put in some parsley, spices, and red pepper pods, chopped fine, and let it boil till you think it is barely done, taking care to stir it often, so as not to burn it; then stir in as much rice, when cooked, as will absorb all the water, which will be one pint of rice to two of water; stir and boil it a minute or so, and then let it stand and simmer until the rice is cooked, and you will have a most delicious dish of palatable, digestible food.

Something for the Children.—Make a dish of molasses candy, and, while it is hot, pour it out upon a deep plate, and stir in the meats of pecans, hickory nuts, hazle nuts, or peanuts, just as thick as you can stir them in, and then let it cool. Be careful and not eat too much of it, for it is very rich. It is a very nice dish for evening parties of the dear little girls and boys; and I have known some "big children" to like it pretty well. Solon Robinson.

Alabama, March 25th, 1849.

<sup>&</sup>lt;sup>1</sup> Reviewer was moved by this article to ask for another southern recipe for bread, "made of hommony, and, perhaps, a little flour and eggs." *American Agriculturist*, 8:245 (August, 1849).

## ALABAMA WHEAT—EARLY CORN, ETC.

[New York American Agriculturist, 8:183; June, 1849]

[March 27, 1849]

WILL your northern readers believe me, when I tell them, as I now do, that I saw to-day, March 27th, a field of wheat all fully headed out and in bloom? To all appearances now, it will be ripe enough to cut in three weeks, if the weather is warm. This early maturity will insure it against all danger from rust, and that is about the only danger of failing in a crop in this part of the country. This piece contains three acres, and is upon the farm of Dr. N. B. Cloud, whose name is familiar to many of your readers, as the man who actually makes manure in the south, and uses it, too, and by which he has raised the most cotton to the acre that ever was grown.

As soon as this wheat is harvested, Dr. Cloud will furnish an account of it, and how he started with 300 grains of seed, sent him in a letter. It bids fair now to make 40 bushels to the acre. Dr. C.'s post-office address is, Lockland, Macon Co., Ala. I advise my southern friends to procure seed of him. To any subscriber of an agricultural paper, I will engage that he will most cheerfully send a little in a letter by mail, if they will write to him, and not forget to pay the postage.

For several days past, I have seen many plows at work among corn, which was up so as to show the rows half a

¹ Noah Bartlett Cloud, son of Noah and Margaret (Sweringen) Cloud, born at Edgefield, South Carolina, January 26, 1808; died at Montgomery, Alabama, November 5, 1875. Studied medicine in Philadelphia. At age of twenty-six married Mary M. Barton. Went to Alabama in 1846, and settled at La Place, Macon County, becoming a cotton planter. One of the founders (1853), and editor of the American Cotton Planter, carrying on a work of primary importance to the agricultural history of Alabama. Opposed secession, but served as a surgeon in the Confederate Army. See sketch in Dictionary of American Biography, 4:232. His views on methods of cotton raising and his difference of opinion with Dr. M. W. Philips on the subject are discussed in Gray, History of Agriculture in the Southern United States, 2:706-7.

mile or more, and which the hands were "thinning to a stand."

Cotton.—I have seen many hundred acres of cotton up, but as the thermometer this morning, after sunrise, was at 34° F., I presume that it is thinned to death.

This part of Alabama is fast coming to the time when all flour eaten here will be made on the many streams that drain the soil, on which will grow the wheat. Low prices for cotton may yet prove as great a blessing to the state as high prices have been a curse.

Solon.

Tuskegee, Ala., March 27, 1849.

#### FACTS IN NATURAL HISTORY.

[New York American Agriculturist, 8:194; June, 1849]

[April 8, 1849]

WHEN I was in New Orleans last winter, I met with a most worthy old gentleman, Judge Strawbridge. I give his name, because there are a good many "old boys" about Philadelphia, that will like to hear of him; and he invited me to go with him over to his place, across Lake Ponchartrain.

Well, the Judge is very intelligent, and tells a great many very interesting stories. Here is one of them:—
"That tree you are looking at," said he, as I was looking at a famous old oak that he did not cut down when he built a house close by, "reminds me of a little anecdote. The first summer that I spent here, at Covington, I lived in a house a mile below. I was sitting one evening on the back gallery, watching the caterpillars crawling along the

<sup>1</sup> George Strawbridge, a native of Maryland, went to Louisiana in the late 1820's, and became an eminent lawyer, particularly versed in mercantile or commercial law. Associate justice, Louisiana State Supreme Court, 1837-1839; judge of the Fourth District Court (New Orleans), until his death in the 1850's. His New Orleans home in 1849 was at 180 Girod Street. Cohen's New Orleans and Lafayette Directory, 1849, pp. 69, 169, 197; Fortier, Louisiana, 2:519; Sketches of Life and Character in Louisiana, 44 (New Orleans, 1847).

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ground under an old oak like this, when my curiosity was excited to see one great fellow, about three inches long. going by at a most rapid rate, quite unaccountable. I got up directly, and went down to see whether he had got a locomotive in him, or what; when, behold, a great longlegged kind of wasp, that we have here, had mounted the worm a-straddle, as we would a horse, and was riding him to the shambles, intending, no doubt, to butcher him about sundown, for supper. It was so curious a sight. that I determined to watch the sequel, and see what the wasp would do with his wormship. But I missed it: for after riding several yards, he passed under a small tree. and directly I heard a rustling in the leaves overhead. and down dropped a lizard directly on the wasp and worm, and knocked the rider heels over head out of sight into the grass, and then gathered up the worm, and in a half minute after had him up the tree, eating him at his leisure, I suppose. This is the way with all nature—the strong rob the weak, which are often sent supperless to bed. I told the story to my family, and they laughed as though they doubted, or disbelieved, the fact. This is a trait in human nature, too. Facts are often doubted, and fables believed.

"Well, years after, my wife and I were sitting under this very tree, when along came another caterpillar and his rider. Now, then, let us watch this, and see what the rider will do with his horse, said I. 'Oh,' she exclaimed; 'but here comes the conquerer for the 'lion's share.' And sure enough, like a hawk pouncing upon his prey, down came another lizard. Ah, well then, let us watch the battle, and see what the lizard will do with the spoil. But we did not; for while the wasp and lizard were fighting for their prey, out came a toad from that very hole there at the root of the tree, and, unobserved by either of the combatants, hastily gobbled up the worm and hopped back again to his hiding place, while the lizard was running around like something half-crossed, or mad, at the loss of his supper."

Such was the story, and it interested me very much, and I hope it will all the boys who read it. If the snake had been there to catch the toad, and the owl to catch the snake, and the boy to catch the owl, how truly natural dispositions would have been illustrated.

Here is another curious fact related by the Judge. "When I first came to New Orleans," said he, "the old Carondelet Canal was the only means of communication with the lake. Upon this, as well as upon the bayou St. John, into which the canal opened, was a great mass of some kind of water plant, a sort of vine, that so covered the water and clung to the bows of vessels as seriously to impede navigation.

"Some time afterwards, there came a Yankee to New Orleans, (I don't mean to say only one—their name is legion,) and he brought with him another 'water plant,' whether on speculation, or not, I don't know. But this was not a vine. It more nearly resembled a house leek than anything else. I forget what he called it. Well, he put it to grow in a water cask, and it multiplied and spread all over the top, and then it broke off in pieces and floated over and down the ditches and finally into the The Frenchmen found and saved the Yankee innovation, but on it went spreading, in spite of curses, and in a few years it was all over the canal and down the bayou. In the meantime, where was the old pest of the canal? Gone entirely. The Yankee innovator had rooted the old *habitant* out, and grew there in its stead. Nobody cared for this: it was not in the way, and it made a very good shade for alligators and catfish.

"After a time, I was walking along the canal, and behold, the Yankee water plant was not there. When, why, or how it had gone, none could tell, but it was gone."

Back of the city, along the old ridge road, (land that is not absolutely under water,) there are some extensive commons. While passing down the Ponchartrain Railroad, the Judge called my attention to this, and then said: "a few years ago, this land was all covered with a per-

fect wilderness of burdock. It was a most decided nuisance. But little grass could grow, when all the ground was covered with these broad shading leaves. Horses and mules that run out at common, were a sight, with their tails and manes loaded and hair all matted together. What influence was brought to bear upon this plant, I know not, but it disappeared as suddenly and as mysteriously as the water plant—all gone—not a root to be found. What was the cause, who can tell? Ah, well, we shall soon disappear, too, and it will only be a few old grey heads, like you and me, that will remember that we were once here."

Now, boys, if you like these anecdotes, I have more of them yet to give you some day.

Solon.

Sparta, Geo., April 8th, 1849.

# MANUFACTURING IN THE SOUTH. GRANITEVILLE.

[National Intelligencer (triweekly), May 10, 1849]

MILLWOOD, (S.C.) April 29, 1849.

Allow me space in your columns for a few words upon this subject, which I hope may be interesting to most of your readers, although, as a writer, I am much better known to the readers of agricultural papers than I am to political ones.

I have just visited one of the finest new Cotton Factories in all the South, and, taken all in all, one of the neatest and best establishments I have ever seen any where. It is located in Edgefield District, (S.C.) twelve miles northeast of Augusta, and about sixty miles southwest of Columbia, upon a small durable stream that here tumbles over the lowest ridge of granite in the State, and is well built of that material, handsomely dressed, and is two stories high, three hundred and fifty feet long, and fifty feet wide. The line of front is broken by projecting buttresses, through which are the entrances, and, without appearing large, afford ample rooms for stairways to

the second story; and, rising in a balcony from above the eves, also affords a stairway and entrance into the cockloft, which is lighted in the roof, and is nearly equal to a third-story.

The water is brought in a mile-long canal, and falls upon two wheels from a forty-feet head.

The cotton is taken into the warehouse from wagons in the street, and passes some hundred feet from there on a railroad into the picker-room, in a stone building separate from the main one, and from thence, by the gradual stages of manufacture, upon the most beautiful and perfect machiney that modern ingenuity and Yankee skill can fashion, through the entire length of the building, and out at the other end in cloth, and up and away into the store-house, corresponding to that of the cottonhouse, but well away, to make all safe from fire. Most of the machinery is now in operation. When all is complete there will be 9,245 spindles and 300 looms, all operated by three hundred men, girls, and boys, from twelve years up, and whose wages average now three dollars a week, most of them working by the piece. They are all natives of the "piney woods," except a few experienced overseers and superintendent.

This mill will consume about ten bales a day and turn out ten or twelve thousand yards of thirty and thirty-six inch No. 14 shirtings and drillings.

The monthly statement ending April 14th shows-

```
$2,995 62 paid for labor.
                 66
  150 00
                     120 gallons oil.
                 66
    88 00
                     1.600 lbs. starch.
    12 00
                     coal and wood.
                 66
                     sundry supplies.
  203 39
2,951 97
             66
                 66
                     45,415 lbs. of cotton, at 6 1/2c.
```

<sup>\$6,400 98</sup> 

Goods manufactured in same time.

1,188 pieces 4-4 sheeting, weighing 13,470 lbs., in 38,448 yards, and cost for labor 2 634-1000 mills per yard, and for stock 2 994-1000 mills per yard, or 5 628-1000 mills per yard, total.

2,650 pieces 7-8 shirting, 26,369 lbs., 87,689 yards, and cost 2 261-1000 mills per yard for labor, and 2 571-1000 mills per yard for stock, or, total, 4 832-1000 mills.

The building is warmed by steam and lighted with oil. Labor is all paid monthly in cash. There are eighty-three dwellings, a hotel, a saw mill, and grist mill, and all needed out-buildings, and schoolhouse, and two of the neatest and prettiest little gothic churches ever seen embowered in the piney-wood forest; and a tract of nine thousand acres of land, including another mill site, all of which has cost the company \$300,000.

Most of the dwellings are two-story, with portico and handsome front yards and gardens, and large enough to give good room for a large family. For small families there are numbers of snug little gothic cottages, all painted like blue granite, and hence the name of *Granite-ville*. The whole conception and finish appears to be due to the active mind of the President of the company, WM. GREGG, Esq.,¹ whom I regret I did not see.

As the place is only a short mile from the Charleston

William Gregg, born in Monongalia County, Virginia (now West Virginia), February, 1800. Removed in 1810 to Georgia, with his uncle, Jacob Gregg, who erected one of the first cotton factories of the South on Little River between Monticello and Madison. Was sent to Kentucky to learn the trade of watchmaker, and remained till 1821. In 1824 established himself in business in Columbia, South Carolina, and became eminently successful. Retired in ill health in 1834, but in 1837 purchased a large interest in Vaucluse Manufacturing Company in Edgefield. In 1838, resumed his business connection with Hayden, Gregg and Company. Traveled in the North and abroad. Wrote essays on domestic industry. One of the best-known cotton men in the upcountry. Snowden, Yates, and Cutler, H. G. (eds.), History of South Carolina, 2:637-38, 1167 (Lewis Publishing Co., Chicago and New York, 1920); De Bow's Review, 10:348-52 (March, 1851).



COTTON PLANTATION IN SOUTH CAROLINA



and Augusta railroad, I hope every traveller who feels a deep interest in the prosperity of our country will pay this place a visit as he passes along.

I have the details of the item of cost, as I also have notes of several other similar establishments, particularly "Vacluse," three miles above; and another large new mill at Augusta, where there is one of the finest water-powers in the country; also, of Columbus, Georgia; but I will not now burden your columns. If, however, they should prove to be current, I will, when I see you face to face, give you a few of my notes.

As I am travelling slowly in my own carriage, (as I have been for six months,) viewing all that I find interesting, as connected with my agricultural tour through the South, it will be some weeks before I reach Washington; but then, if not before, I will try to write a more interesting sketch.

During my journey I have had great opportunities to see negro slavery as it is, and am free to say that all the objections I ever had to the institution must give way to the strong arguments of light and reason, that, at least to the negro, it brings a thousand blessings to one curse. I could tell you facts about the situation of the three hundred slaves upon the plantation of Col. Wade Hampton, where I now write this, that would go to show the condition of these people to be almost inconceivably better than that of thousands of white "freemen" throughout all this region—the same class of people from whence Col. Gregg has drawn his factory operatives, because they are found to be *cheaper* than blacks; and, for an obvious reason, there are no children, old, sick, or infirm to be supported. They are *free*, which also means free to

¹Wade Hampton, son of General Wade Hampton (1754-1835), born April 21, 1791; died on a plantation near the Mississippi River, February 10, 1858. Acting inspector-general and aide to General Jackson at New Orleans, in January, 1815. Appletons' Cyclopædia of American Biography, 3:69-70; his Carolina plantation is described in The Plough, the Loom, and the Anvil, 2:164-67 (September, 1849), and by R. L. Allen in the American Agriculturist, 6:20-21 (January, 1847).

starve if unable to work; while the slave is always provided for at his master's expense.

The damage done by the late frost you can hardly form an idea of unless you were here to see. The cotton crop must be greatly shortened, for the scarcity of seed to replant is very great, while all that was above ground has been killed. In addition to this there has been no rain for five weeks, and of course the *replant* cannot vegetate. Fruit has been almost entirely killed. The persimmon and some of the oaks are as dry as in midwinter. Corn was much of it killed a little below the surface of the ground, and has to be replanted.

I am, with much respect, yours, &c.
Solon Robinson.

A FEW MORE TRIFLES FOR THE LADIES.
[New York American Agriculturist, 8:193; June, 1849]

[April, 1849]

To Purify Tallow.—Mix 5 parts of beef tallow with 3 parts of mutton tallow, in a copper or iron kettle, with half a pint of water to each pound of grease. When melted, mix 8 ounces of brandy, 1 ounce of salt of tartar, 1 ounce of cream of tartar, 1 ounce of sal ammoniac, 2 ounces of pure and dry potash, with the tallow. Boil fifteen minutes, and set off to cool. When cold, take off in cake and bleach it in the air and dew a few days and nights. It will then be hard and white. Candles, with a fine cotton-yarn wick, (6 to a pound,) will burn 14 hours.

Tomato Catchup.—First bake your tomatoes, then squeeze them through a sieve. Add to 6 quarts of juice an equal quantity of wine vinegar; boil slow until it begins to thicken; then add cloves, allspice, and pepper, ½ an ounce each, cinnamon ¼ of an ounce, and 2 nutmegs, all finely powdered. As it thickens, add four spoonfuls of salt, and when done, pour out in an earthen dish to cool. Bottle, cork, and seal, and it will keep years in a warm climate.

Potato Pudding.—Take ¾ of a pound of sugar, ¾ ditto of butter, and beat well together; add one pound of boiled potatoes, (Irish or sweet,) rubbed fine through a collander or mashed; six eggs, the whites and yolks beat separately, and a wineglassful of brandy and one of wine, a trifle of rose water, and cinnamon or nutmeg, as much as you like.

Rice Bread.—Take six tablespoonfuls of boiled rice, and one of butter; rub them together, and then pour in half a pint of milk; add two eggs, and six tablespoonfuls of wheat flour. Mix all well together, and bake a little brown; and you will have a very good and wholesome kind of bread.

Solon.

Columbia, S. C., April, 1849.

#### COTTON MANUFACTURING AT THE SOUTH.

[New York American Agriculturist, 8:212-13; July, 1849<sup>1</sup>]

[May 6, 1849]

Answer to M. W. Philips, of Mississippi.—If no other person has done it, I offer the following answer to Dr. Philips' inquiry about a cotton factory, &c., in the March number of the Agriculturist.<sup>2</sup>

First, the Size of Building.—The Graniteville Factory, in Edgefield District, S. C., 12 miles north of Hamburg, contains 9,245 spindles and 300 looms, and all the machinery of the very best kind and modern improvements, for making No. 14 sheetings and drillings. The building is of solid blue granite, 350 feet long and 50 feet wide, two stories high, with a good room in the attic, equal to half a floor or more. The picker room is also stone, separate from main building, two stories high. Store houses, offices, two churches, a school house, 83 dwellings of wood, and all the fixings of the neatest kind, with two dams, and races a mile long, 40 feet head, two turbine

<sup>&</sup>lt;sup>1</sup> Reprinted in De Bow's Review, 7:456-58 (November, 1849).

<sup>&</sup>lt;sup>2</sup> "Cotton Manufactures—Market Wagons," American Agriculturist, 8:93.

wheels, a saw and grist mill, a hotel, and 9,000 acres of land, all cost \$300,000, or \$32.44 for each spindle. The mills in Lowell, cost from \$35 to \$38 a spindle. A steam mill at Salem, Mass, cost \$21 a spindle for 30,000 spindles, not including dwellings for operatives.

The details of cost at Graniteville are as follows:-

Real estate,\$	12,222.35
Canals and dams,	9,505.46
Factory buildings,	60,144.57
Water wheels and flumes,	6,949.12
Shafting and gearing,	12,663.99
Machinery,	121,754.03
Fire and steam apparatus,	5,947.65
Starting up mill, and furniture,	3,587.96
Saw mill, machine shop, &c.,	9,079.86
Cord clothing,	3,010.00
Dwelling houses,	43,293.18
Streets and fences,	1,998.80
Contingencies not yet carried to proper ac-	
count	3,307.49
Margin left for future expenditures,	6,539.57
-	

Total, .....\$300,000.00

The building is warmed by steam pipes as all should be. There is a new factory at Augusta, Georgia, containing about the same amount of machinery, 208 feet long, 50 wide, and five stories high. The stairways of each are in projecting towers in front. Both of these are operated with white laborers, natives to the soil. These will consume ten bales a day and turn out 10 to 12,000 yards, of 30 and 36-inch sheetings and drillings. Cotton costs now 63/4 cents delivered. Average wages of all the men, women, and children, at Graniteville, in April last, \$3.05 a week. Most of work done by the piece. Number of hands, 300.

At Vaucluse, on the same stream, the number of hands 94. Average wages, through last year 37.85 cents per

day of 12 hours work. Number of spindles 2,280 and 43 looms, making 8-ounce Osnaburg and bundle varn. Hands employed, 11 men, 50 to 60 girls from 10 to 25 years, and balance boys, from 12 to 20 years of age. Capital in the factory and buildings and lands, counted at cost, on a second-hand purchase by General Jones, the present owner, \$30,000 and floating capital \$20,000. The building is granite 40 feet by 80, four stories high, with a room in roof equal to three fourths of a story, and stairway in projecting tower. The picking room separate. 20 feet by 40. The machinery not of most modern kind. as some of it has been in use 17 years. In 1848, the wheel run 2831/3 days, and used 367,404 lbs. of cotton, excluding waste, costing 6 cents 7.388 mills per pound, making \$24,758.81, and made 71,615 lbs. of yarn that netted 14 cents per pound, and 295,789 lbs. of cloth, or 591.5791/4 vards that netted 7 cents per vard. The details of cost of this was, for 6,8951/4 days' picking, &c., \$2,268.39, or 6.175 mills per pound.

		mi	lls per lb.	
7,922	days'	spinning,	6.933	\$2,547.37
2,246	"	spooling & warping	1.406	415.98
1,4501/4	"	dressing,	2.131	630.24
569	"	drawing in,	0.633	187.30
4,9373/4	44	weaving,	9.360	2,768.64
562	"	trimming & baling,	1.164	344.34
1,114	66	hanking and		
		bundling yarn,	4.953	354.75
$840\frac{3}{4}$	44	machinist, watch, r	oller coverer,	
		and all extra		
		work,	$1.559\mathrm{mills}$ per	lb.,572.90

making the cost of labor put upon cloth, to 2 cents 9.361 mills per lb., or 1 cent 4.681 mills per

<sup>&</sup>lt;sup>1</sup> James Jones, born October 3, 1805; died October 20, 1865. Practiced law at Edgefield. Served in the Seminole and Civil wars. Held many state offices. The Vaucluse factory is said to have been the first cotton factory in South Carolina. See Chapman, John A., History of Edgefield County from the Earliest Settlements to 1897, 382-84 (Newberry, S. C., 1897).

vard, and the cost of labor on yarn 1 cent 9.62 mills per lb., to which add as above, cost of cotton, and 743 gallons of oil equal to 2.471 mills per lb. of cotton, 908.03 Contingencies which include materials, commissions, insurance upon \$20,000, &c., and is equal to 1 cent 1.305 mills per lb. of cotton, 4.153.39Transportation on cotton yarn and cloth 3.856 mills per lb., 1,416.73 73 barrels of flour for sizing, chargeable to cost of cloth 1.092 mills per lb. 323.20 48 reams of paper, chargeable to cost of yarn, 1.156 mills per lb.. 82.80 Interest on \$50,000 capital, 7 per cent, 9.526 mills per lb., of cot., 3,500.00 Net profits above all cost and interest as above, 7,826.81 Total cost of cloth per lb, 12 cents 4.999 mills, or 6 cents 2.499 mills per yard.

One fourth of the cotton used was short staple Nankin, and made into striped Osnaburgs. All cloth 31 inches wide, 8 oz. to the yard. Average daily consumption of cotton, 1,298 lbs.

Total cost of yarn, 11 cents 5.322 mills per lb.

All the hands, except a few men who are unmarried, and all that can, work by the piece. Families all live in factory houses, rent free, and cultivate all the land they choose to fence. General Jones has been here nine years, and no case of fever among hands. The mill stopt a few days last year on account of pneumonia among the operatives. The General has tried both and gives preference to white labor. At Saluda Factory, near Columbia, all operatives are black. DeKalb Factory, at Camden, has 1,680 spindles and 40 looms, 93 hands; two thirds white and one third black. Average 1,200 lbs. of yarn and cloth a day, one third yarn and two thirds 8-ounce Osnaburgs. Used last year 353,681 lbs. cotton and made 90,145 lbs of yarn and 234,055 lbs. of cloth—running

mill 288½ days of 11½ hours. Size of building 125 feet by 29, four stories. Average wages of hired blacks, 18¾ cents a day. They board themselves. Wages of whites, 13 to 26 cents, and weavers by the piece—18 cents a cut of 33 yards, and average about 3 cuts a day. Weavers' wages of the last month from \$9.90 to \$18 per week.

Marlborough Factory, near Bennetville, S. C., owned by Captain M. Townsend, 1 runs 1,000 spindles on coarse yarns, Nos. 5 to 10, with 35 hands from 10 years old up, averaging \$1.90 a week, including 5 slaves counted at \$8 a month—consumes 500 bales a year, at 5 cents a pound, and made last year 162,500 lbs. yarn. Average value at home,  $12\frac{1}{2}$  cents per lb. Cost of production in labor  $2\frac{1}{2}$  to  $2\frac{3}{4}$  cents per lb. Capital \$20,000 in mill and \$5,000 floating. Sells about a third of yarn at home, and balance in New York. Hands all work by the day and week, and included in average cost is a machinist now repairing, whose wages are \$9 a week.

Raleigh, N.C., May 6th, 1849.

### Mr. Robinson's Tour.—No. 12.

[New York American Agriculturist, 8:366-67; Dec., 1849<sup>2</sup>]

[Written October 6, 1849, covering May 9, 1849<sup>3</sup>]

The Turpentine Business of North Carolina.—In this number, I will give some facts concerning the turpentine business of North Carolina. The first place that I examined particularly, was that of Mr. David Murphy, ten

<sup>1</sup> Meekin Townsend, prominent merchant and manufacturer. Died in 1851 at the age of forty-five. Marlborough Cotton Factory was burned in 1850 and never rebuilt. Cyclopedia of Eminent and Representative Men of the Carolinas of the 19th Century, 1:191 (Madison, Wis., 1892).

Reprinted in The Wisconsin Farmer and Northwestern Cultivator, Racine, Wisconsin, 2:5-6 (January, 1850).

<sup>3</sup> This article is placed here to conform to Robinson's itinerary.

<sup>4</sup> David Murphy, son of Patrick and Elizabeth (Kelso) Murphy who came from Scotland to America and settled in Sampson County, North Carolina, in 1774. Patrick acquired much heavily timbered land and built a substantial home. David Murphy was

miles from Fayetteville, where he has lately settled, having previously carried on the business in Hanover county, which he was obliged to abandon in consequence of the loss of 30,000 trees in one season, by what some assert to be an insect, while others think the insect to be a consequence of the disease that kills the pines (See p. 225 of our seventh volume). Be this as it may, the destruction is enormous, and if it were not for the almost unbounded quantities of long-leaf pine in the states of North Carolina, South Carolina, Georgia, Alabama, Florida, Louisiana, and Mississippi, it might well be feared that the source of supply would soon be exhausted.

Mr. Murphy bought his land about two years ago for one to two dollars an acre, and it is of but little value except for a turpentine plantation. He has at present about 60,000 trees boxed, and is daily increasing the number. Four hands can tend 36,000 trees; that is, three hands to cut and one to dip; and, if the trees are good, and the season propitious, they will gather 800 barrels of turpentine a year. This is now, (May, 1849,) worth, in Wilmington, the great turpentine depôt, \$2.25 a barrel, and cost of transportation is fifty cents a barrel. He thinks that at present prices, in a good place, hands will average about \$200 a year clear of expenses. Mr. M. distils all of his pitch. Two hands will run a hundred barrels through in two days. This will make 700 gallons of spirits, which is put up in the best of seasoned whiteoak casks, coated with glue on the inside, to prevent leakage. It is worth about 25 cents a gallon at Wilmington, pay for barrel extra. The rosin, if from new trees, or, as it is termed, "virgin turpentine," is usually saved and put up in the barrels from whence the crude article has been taken, and is worth, or was, last year, about \$2

living in Cumberland County from 1850 to 1853, and served in the county courts as a juror from the Rockfish section. Cumberland County Court Minutes, 1850-1853; Connor, Robert Diggs Wimberly, et al., *History of North Carolina*, 6:338 (Lewis Publishing Co., Chicago and New York, 1919); letter from the North Carolina Historical Commission to Herbert A. Kellar, May 14, 1936.

a barrel; while the common rosin is often not worth more than 25 cents, and will not pay for transportation any considerable distance. Therefore, at many places, not convenient to water carriage, it is run out from the distillery in wooden troughs, or gutters, that lead it far enough away from the building to be burnt without danger, and is there set on fire. I have thus seen many tons destroyed, while I could not but think how valuable it would be to many a poor family in this city to help make the pot boil. Millions of pounds are consumed in this way every year. The spirit from new boxes is also of a superior quality. I have seen it as limped as spring water.

In commencing a new place, the first process is, to chop a "box," or hole, in winter, in one side of the tree. close down to the ground, that will hold from a pint to a quart, according to the size of the tree. An expert hand will cut about sixty boxes a day. About the first of March. the season commences, and continues till the first of October. Every week, or oftener, if there should be rain. a hand goes round and "chips" off the bark about an inch wide, and nearly as long as the length of the box. This is done with a tool constructed to suit the position of the part to be cut. When first commencing, a crookedbladed hatchet is used. Then a tool with handles like a drawing knife, with a blade that cuts a chip like a gouge. Finally, a similar tool is attached to a pole that enables the operator to make his cut 12 or 15 feet above the ground. When one side of a tree is "used up," a box is cut in the other, and sometimes, in large trees, a third box is cut. The second side is always the best. Some persons tap all sides at once. This exhausts the tree much quicker. By the first process, trees will last eight or ten years. After the "face" becomes several feet long, most of the turpentine coats the tree before it reaches the box. This has to be scraped off, but is not near the value of new boxes, which, of some new and good trees, require emptying once in four weeks, but generally three or four times during the dripping season. The turpentine is taken out of the boxes by a paddle, which should be of iron, and so should the buckets. These are emptied into barrels standing around all about the forest. Water in the boxes or barrels does no harm, but rains stop the dripping until recut. Damp weather is best. On clay land, the product is much affected by drouth. The business is considered very healthy, and those engaged in it are fond of that kind of employment. It requires, however, the most able-bodied men. After the close of the season, the hands are employed during the winter in scraping old trees, boxing new ones, and making barrels, preparatory to the spring business.

Mr. Henry Elliott,¹ a gentleman well known in the neighborhood of Fayetteville, says that a first rate hand can "chip" from 10,000 to 12,000 trees a week and go over his task every week at that. He has often seen new boxes filled in three weeks, but old ones run seven or eight. He says that he has observed the greatest death among pines in February, when there were no insects to be seen. He entirely repudiates the idea that a cut on dead pine is the cause of death to the growing trees. His experience is somewhat extensive, as he has been all his life engaged in the lumber business. He says that trees, when attacked by disease, flow two or three times as fast

<sup>1</sup> Henry Elliot, eldest son of Mary Turner and George Elliot of Ellerslie plantation, in Harnett County, North Carolina. George Elliot came to America before the Revolution and engaged in the lumber business, later becoming an extensive planter and large slave owner. Henry Elliot served in the War of 1812. He was justice of peace in Cumberland County and active in the administrative duties of the county, 1845-1853. Married Isabella Smith, March 6, 1819. His father left him considerable property including, "one-fourth part value of all lands not heretofore conveyed, . . . which shall . . . include one-half of one of my saw-mills, . . . one-sixth part of all my slaves, . . . one-fourth of all the oxen, ... one-sixth of all the remaining of the stock. . . ." He was directed to pay in cash or negroes \$500 toward the education of his sister. Will of George Elliot, probated December term of court, 1807, Cumberland County Wills, 1759-1869; Connor, History of North Carolina, 5:271.





THE TURPENTINE INDUSTRY
[From One Hundred Years' Progress of the United States, p. 95]



as healthy ones. Those which have been drained of their turpentine are nearly worthless for lumber.

Between Fayetteville and Tarborough, I saw a great many thousand trees boxed, and in one place 15,000 are chipped by two hands working four days a week. The most common quantity to a hand is from ninety to one hundred and twenty barrels a year. It is estimated to take 10.000 trees to fill 50 barrels. A barrel contains 280 lbs. Hands, however, often have made 200 barrels of dip turpentine in a season, and nearly half as much more of "scrape": the latter is of but little value. It is estimated to be worth two cents a mile per barrel to haul turpentine. Some of the vehicles which I have seen in use for that purpose would be curiosities worthy a place at the fair of the American Institute. One ox harnessed in shafts of a most primitive-looking cart driven by a "raal ginuine North-Carolina piney-woods man," or as is the case sometimes, a pair of shafts without any wheels, with a barrel or two of crude turpentine for a load, would be a curious sight in Broadway.

The making of tar I must reserve for another letter, lest I should stick my readers fast in an over dose of pitch, turpentine, and tar.

SOLON ROBINSON.

New York, October 6, 1849.

MR. ROBINSON'S TOUR.—No. 12 [13].

[New York American Agriculturist, 9:27-29; Jan., 1850]

[Written November 7, 1849, covering May 13, 1849, and following]

Estates of the Messrs. Burgwin.—About three miles below the ferry at Halifax, N.C., on the east side of the Roanoke, I entered the Burgwin estates, formerly owned by the late Thomas Pollock, Esq., of Edenton, and only

<sup>1</sup> In the middle 1700's Thomas, George, and Cullen Pollock owned land in Chowan, Bertie, and Tyrrell counties, North Carolina. In October, 1816, Thomas Pollock obtained a grant of 2560 acres of land in Chowan County. Letter from North Carolina Historical Commission to Herbert A. Kellar, May 14, 1936.

for a few years past by the present proprietors, Mr. Burgwin, senior, and his sons, T. Pollock Burgwin and Henry K. Burgwin.1

It was just before sundown, on the 13th of May, when I crossed the ferry, after a long day's drive, which I was prompted to do by the fact that the river and clouds both threatened a flood that might detain me several days, which I proposed to spend beneath the hospitable roof of an intelligent North Carolina planter, rather than in a dull town. So taking such directions as a negro only can give a stranger, I commenced a voyage of discovery through two or three intervening plantations, and was very near becoming entangled with blind roads and back water, already overflowing and cutting off communication, with darkness and a thunder-storm threatening. when I discovered a carriage approaching, which I found to contain a handsome, intelligent-looking gentleman, with piercing black eyes, and black hair just beginning to show a few silvery streaks. No sooner had I inquired if that was Mr. Burgwin, and announced my name, than he leaped from his own, and approached my carriage to welcome me most heartily as an old acquaintance, though this was our first meeting. Sending forward the carriage upon the errand of mercy that brought him out, which was to carry consolation and mercy to a sick servant, he took a seat with me and drove to the "Cottage," the residence of Mr. T. Pollock Burgwin, whom I had just met, and of his father when not at his place on the Trent. Although I missed the much-loved pleasure of female society, we managed to pass the time rapidly along some-

<sup>1</sup> John Fanning Burgwyn (the name was originally Burgwin), a native of Thornbury, Gloucestershire, England, born March 14, 1783, died June 18, 1864. Two of his six sons, Thomas Pollock and Henry K. Burgwyn, lived for a time in the North. Upon returning to plantation life in North Carolina, they proposed to manumit their slaves, but experiments with white labor proved so costly that they were apparently reconciled to the slave system. Ashe, Samuel A'Court, Biographical History of North Carolina . . . , 8:58-66, 73-80 (Greensboro, 1905); Phillips, Ulrich B., Life and Labor in the Old South, 252-53 (Boston, 1929).

what beyond midnight, conversing exclusively upon the subject of improving and rendering fertile the worn-out lands of North Carolina and Virginia. Upon this subject Mr. B. is an enthusiast. He has been an extensive traveller, and has visited some of the best cultivated farms of the northern states; and when he came into possession of his property here in 1840, instead of leaving it to be utterly worn out by overseers, who never learned any other art of tillage than cutting down and burning up timber, planting cotton, and wearing out land,—which is then "turned out" to grow up again while they cut down more,—he determined to apply the knowledge he had gained from reading and travelling, and devote all the energies of his strong mind to an effort to change that old, ruinous system, which has nearly destroyed and depopulated some sections of the south. To carry out his plans, he found it absolutely necessary to change his overseer for a young man who had no plans of his own, but was willing to obey orders.

In speaking of the operations of this gentleman it may be understood that I also include the plantations of his father and brother, as all three are conducted upon the same general system. In the first place, cotton is utterly discarded from the premises, and clover, yes, rich, luxuriant red clover, by the hundred and thousand acres, has been made to grow where nothing but brown sedge and oldfield pines grew before. Illustrative of this fact Mr. B. related to me an anecdote. There was one tract known as the "old field," containing about an hundred acres, upland, clayey, loamy soil, nearly level, "lying out," that is, abandoned as no longer fit for cultivation, covered with brown sedge, and growing up to oldfield pines.

Calling the attention of his overseer one day, who had already set him down as utterly crazy, and determined to ruin his land if not himself by his "new-fangled plows," and insisting upon having every furrow at least ten inches deep, he fairly drove the man to a standing point by ordering him to prepare that "old field" for the plow,

Utterly amazed at the order, the fellow dropped the reins upon his horse's neck, turned round, and stared Mr. B. in the face as if to discover whether he was in sober earnestness, and answered him with an inquiring "Sir?" Mr. B. repeated the order, and the overseer replied: "Why, Mr. Burgwin, do you expect to raise a crop upon that field? If you do, I can assure you that I wore that land out ten years ago."

"I know it," said Mr. B.; "but I don't intend you shall wear out my land; and if you think you cannot conduct my business just as I think best, I will try to get some one that will do it; for I would not allow you to manage the place according to your notions, if you would give me

five thousand dollars a-year."

"Well, sir, if you order it, I suppose I can clear up and plow the land; and, if you insist upon it, will turn you up a bed of brick clay, ten inches deep; but let me tell you, sir, you will never make enough to pay for the salt your horses eat while doing it."

Well, the "old field" was plowed up, and manured as well as the scanty supply would afford, and planted with The first crop was twelve bushels to the acre. the second, thirteen bushels, the third, six bushels of wheat; it was then dressed with a good coat of stable manure and forty bushels of lime to the acre, and sowed with wheat, in October, '48, which, if it had not been for that destructive frost in April, '49, would undoubtedly have averaged twenty, and probably twenty-five, bushels to the acre, and still carry a most excellent crop of clover, which, after receiving a bushel of plaster to the acre in May, if it does not "pay for the salt the horses eat," it will pay for a considerable quantity that the herd of cattle will require while feeding upon it. Cattle so fed are under charge of a herdsman, and at night are yarded in temporary pens upon the most barren knolls or galled hill-sides; which puts them in a condition, in their turn. to produce rich crops of corn, wheat, and clover.

The order of rotation is,—commence with a field at

rest, and plow ten inches deep, in April and May, and sow cowpeas broadcast, and harrow in: or break up, that is plow in the fall or winter, turning under all the manure that can be given. In the spring, plant corn, and, at the last working of the corn, sow peas broadcast; cut off the corn in September, plow under the peas, and give a top dressing of lime, at the rate of 35 or 40 bushels per acre, and then sow and harrow in 5 to 8 pecks of wheat per acre. In February or March, following, sow 4 quarts of clover seed per acre. Harvest the wheat in June, and sow one bushel of plaster per acre in August, and allow no stock to run upon the stubble. Next April, or May, sow again one bushel of plaster per acre, and pasture lightly during the summer. In August of this year, fallow for wheat, which is seeded in October, and the clover then seeds itself. For corn, the land is thoroughly harrowed after plowing, and then planted in drills, five feet apart. Sometimes a single stalk is left every 18 inches apart, in the drills; at other plantings, two stalks of corn are left every 36 inches apart, in the drills. The corn is then cultivated with small plows, cultivators, and hoes.

Manure is used, either upon corn or wheat ground, on such parts as require it most. But after the land is brought to that state, by means of the valuable system of plowing, manure, and lime, that it will produce a good crop of clover, Mr. B. is sure of a good crop of wheat or corn, whenever required.

Lime costs about ten cents a bushel, and is applied once in five years, only. It is brought from New York in the same vessels that come after corn and wheat, which were first induced to come up the Roanoke thus far by the influence of the Messrs. Burgwin. This point is 115 miles above the sound, and vessels are towed up by steamboats. One vessel brought up 2,100 bushels of lime, last spring, which was unloaded by the hands upon H. K. Burgwin's place, in one day, and 6,650 bushels of corn, (186 tons,) put on board in three days more. The price of corn, on board, was 53 cents, Wheat 95 cents. The Messrs. Burg-

win estimate their present crop of wheat at 20,000 bushels, and of corn, last year, 26,000 bushels; and the neighborhood ships from 500,000 to 600,000 bushels of corn a-year. The amount of H. K. Burgwin's sales, last year, was \$222 to each field hand; and one of his neighbors, below, Mr. Richard H. Smith,¹ to \$245—which is better than has been done in cotton for many years. Mr. Smith's entire crop sold, was ninety-three barrels of corn, and 12,000 pounds of seed cotton, to each hand, counting all in the field over fourteen years old. [A "barrel" of corn is five bushels of shelled corn.] Mr. H. K. Burgwin has made some pork in former years, but does not think it good policy to feed sound corn to hogs, at present prices of corn and pork.

While I was at these plantations, a flood in the river, which rises thirty feet, spread over much of the bottom lands. This they are about to prevent by heavy embankments; but it is a question with me whether it will pay costs; for, notwithstanding loss of crops occasionally, these overflows add immense fertility to the land.

The Messrs. B. use nine of Hussey's reapers, which they infinitely prefer to M'Cormick's;<sup>2</sup> and Mr. T. P. B. was engaged in erecting a threshing machine to go by steam, similar to Mr. Bolling's, on James River, which he finds necessary to meet the demands of his increasing crops, under his, (in that region,) new system of farming; notwithstanding the predictions of neighbors, over-

<sup>1</sup> Richard H. Smith, influential planter, born near Scotland Neck, North Carolina, May 10, 1812. Lawyer. State legislator, 1848-1850, 1852-1855. Delegate to Secession Convention, 1861. First president of the Roanoke and Tar River Agricultural Society. Died March 3, 1893, at Scotland Neck. Allen, William C., History of Halifax County, 209-12 (Boston, 1918).

<sup>2</sup> Hutchinson, William T., Cyrus Hall McCormick . . . , 370-74 (New York, 1930), gives an interesting account of a visit of A. D. Hager, McCormick's agent, to the Burgwyn plantations in 1854 for the purpose of attempting to overcome the prejudice of the Burgwyns. The selection of Hager, a Vermont Yankee, for this diplomatic mission was not a happy one, and the Burgwyns continued their preference for Hussey's machine.

seers, and even negroes, that he would ruin his land, break up himself, and be ready to sell out, after trying his "new-fangled notions" a year or two. Besides his deep plowing, which, it was thought by some persons, would destroy the fertility of the soil, he has made a good deal of use of the subsoil plow; and the amount of ditching which he has done is very great; but his increased crops will soon pay the expense. His crop of corn, last year. upon 600 acres, averaged thirty-one bushels; but he aims at an average of forty-five. The usual average, upon upland, will not exceed fifteen, and forty bushels is considered a great crop, even on the swamp lands upon Trent River; so says the elder Mr. Burgwin. To show the enormous increase of manure. I will state that he hauled out. last year, upwards of 3,000 four-horse, or ox loads; this is spread broadcast and plowed in. His crop sold, the same year, from the labor of fifty hands, (besides ditching, manuring, and other improvements, and making all supplies of bread and meat, and part of the clothing for the people.) was 10.000 bushels of corn, at 45 cents, and 3,000 bushels of wheat, at 90 cents. The wheat, last year. averaged, upon 270 acres, twelve bushels; and upon fifty acres of that which alone was limed, the average was twenty-two bushels—more than paying for liming in the first crop.

His growing crop, when I was on the place, was 450 acres of wheat, 350 corn, 520 clover, upon which he keeps an hundred head of cattle, and hogs unnumbered. He had, last year, however, 24,000 pounds of pork, which was mostly fatted upon "wild potatoes," peas, pumpkins, clover, and soft corn. The crops upon each of the other plantations, are upon nearly the same scale.

The Messrs. Burgwin give it as their opinion, that a planter cannot expend money in any way, with such a certainty of making an hundred per cent. upon the expenditure, as in the purchase of lime, plaster, and clover seed. If it is objected that they have no facilities to obtain it, let them remember that these gentlemen had none

when they commenced operations. If the people of the southern states desire to prevent the country from becoming a desert, they must open the navigation of streams and build railroads. Do not say "we can't;" look at the New York and Erie Railroad, carried through almost impassable mountains, and you will then say, "we can, we will." Besides, if all the land upon the Roanoke were under such cultivation—and it is all susceptible of it—as these plantations and a few others are, there would be a daily line of steamboats, instead of an occasional vessel finding its way up to carry off the produce. Mr. Burgwin, senior, told me that he got one cargo of lime at his place on the Trent, for four cents. It came as ballast, which will often be the case when the quantity of grain increases as it may, by the use of lime.

Mr. H. K. B. pointed out a spot in the midst of one clover field, still covered with broom sedge, which he left as a memento of what the whole was before lime and manure altered the whole appearance as well as fertility of the place. Mr. B. told me that there are about thirty miles of fencing upon these places, to keep out other folks' cattle. What a tax! But it is just so all over the United States. At his house I found a most lovely and accomplished lady, delightfully situated in the new mansion at the "Hill Side," but which, I regret to learn, has since been destroyed by fire. I hope Mr. B.'s valuable library, in which was an abundant supply of agricultural books, was saved. Mrs. B. appeared more lovely in my eyes, in consequence of meeting her in the negro quarter administering to the sick—an occupation, in my opinion, that always makes a woman angelic. She was a Greenough, of Boston; and it gives me pleasure to bear this just meed of praise to her friends there and elsewhere.

P.S.—Since the above was written, I have had the pleasure of meeting Mr. T. P. Burgwin in this city, and he informs me that they have just shipped five head of shorthorn cattle, purchased of Mr. Vail, last summer,

which they hope will not only improve their own herd, but give an impetus to improvement of the stock of all that region. They have also contracted for 40,000 bushels of lime to be sent forward. This will cost them, delivered on their plantation, ten cents a bushel. Mr. B. has just been informed that a great freshet in the Roanoke has burst their embankment and injured their crop of corn materially, and has probably destroyed a great deal of corn upon all the low grounds of other plantations.

New York, Nov. 7th, 1849.

### FARM OF MR. BOLLING, IN VIRGINIA.

[New York American Agriculturist, 8:254-55; Aug., 1849]

[May ?, 1849]

ONE of the most interesting places that I have visited, during my long journey through the southern states, is the farm of Robert B. Bolling,¹ at Sandy Point, on the James River, 70 miles below Richmond, and 65 above Norfolk, at the junction of the Chickahominy. It is the old Lightfoot² estate, and contains about 7,000 acres, 2,700 of which, in one enclosure, Mr. B. has in cultivation; that is, 1,000 acres in wheat, 535 in corn, 50 in oats, and the remainder is one half in clover, and the other half in fallow, including the necessary ground for yards, gardens, buildings, and roads, which are plenty and good. Of course, the quantity of acres, in the different crops, vary slightly with each year.

<sup>1</sup> Bolling was considered one of the best planters in the Old Dominion. For further description of his agricultural operations see *American Agriculturist*, 9:364-65 (December, 1850). A complete description of this plantation and Bolling's plantation method was given by his overseer, A. Nicol, in the *Farmers' Register*, 9:213-16, 343-45, 485-87, 586-89 (1841).

<sup>2</sup> Bolling acquired the Sandy Point estate through his wife, Sarah Melville Menge. Her mother had received it through her first marriage with William Howell Lightfoot. See William and Mary College Quarterly, series 1, vol. 3:108 (October, 1894). For further information on the Lightfoot family, see Tyler, Lyon Gardiner (ed.), Encyclopedia of Virginia Biography, 4:169-70 (Lewis Historical Publishing Company, New York, 1915).

Mr. Bolling resides mostly in Petersburg, and the farm is under the superintendence of Mr. Nichol, a very intelligent Scotchman; yet, it is plain to see, that the owner, unlike many others, is the master spirit that guides all. Having heard of the vast improvements that he had made upon this old worn-out place, which came into his possession a few years ago, I called upon him at Petersburg, and expressed a desire to see it; when he readily offered to go down with me, so that I had the pleasure and advantage of his company while there. When he came in possession, in 1835, the yield of wheat, per acre, was three and a half bushels; though he thinks a fair yield, if the season had been good, might have been nearly double that. The average, for several years, has been from 15 to 18 bushels, and upon some lots of one to three hundred acres, he has averaged 24 to 37 bushels. If it had not been for the frost, in April, it would probably have averaged, this year, over 20 bushels upon the whole thousand. This has been brought about principally by lime. The first dressing, he gave fifty bushels to the acre; the second one, thirty five bushels; and the third one, the same; in all, 120 bushels. The present cost of slacked lime, at his wharf, is six and a half cents a bushel. Some of his cost more. The former average yield of corn was ten to fifteen: now thirty five bushels to the acre. His crop of corn, last year, was 18,000 bushels, 12,000 of which sold at 45 cents on board the vessel at home. The remainder, as large as the pile may seem to some of our New-England farmers, was needed for consumption upon the place. Mr. B.'s wheat crop of last year was 14,000 bushels, which sold on board at 85 cents. The highest price, any year, \$1.30. Average price, \$1; average price of corn, 55 cents; highest price, 90 cents. Besides lime, he uses plaster, bones, manure, and dry straw, as fertilizers, and thus produces most abundant crops of clover; and so, not only keeps up the fertility of the soil, but, by

<sup>&</sup>lt;sup>1</sup> A. Nicol moved to Sandy Point with his wife and children about 1827. Southern Cultivator, 6:105 (July, 1848). Contributor to American Agriculturist and Farmers' Register.

this course, has greatly more than doubled the crops, and made the farm very profitable; but it is increasing in fertility and value every year.

Mr. B. pursues the five-field system; that is, a rotation of, 1st, corn; 2d, wheat; 3d, clover; 4th, wheat; 5th, fallow. Upon the fallow, which, however, is well coated with volunteer clover, the straw is spread, and with lime, if required. He commences seeding in, first week in October, and finishes, if possible, by 10th November; quantity of seed, per acre, from 1½ to 1½ bushels; harvests, 15th to 20th of June; cuts wheat with cradles. He thinks, where laborers are plenty and cheap, that reaping machines are not an object of importance. He owns 180 servants, one half of whom are working hands in the field; and during harvest he hires 80 or 100 more.

As soon as the wheat is harvested, the wagons commence bringing it to the granary; and here the ingenuity of man and the power of steam begin to show how wonderfully this great giant can be made to help the cultivator of the soil. A constant stream of sheaves are flying from the wagons outside, and as they light upon the floor, are caught up, the bands cut, and thrust into two great threshing machines, that stand side by side, and this is the last that man is required to do with grain or straw. The one passes out, and far away from the building; and the other, after falling down into the winnowing machine, is thus cleaned, and then taken by elevators to the top of the three-story building, and there distributed into the different store rooms, which are capable of holding 40.000 bushels. A thousand bushels can be thus threshed and put up every day. When sold, and ready to be shipped, it is let down through a spout into a car that runs upon a railway directly over the hatchway of the vessel, lying at a fine new wharf, a few hundred feet from the granary: and in one second of time the car load is emptied into the hold, and in two minutes more is back, and ready for another load.

The largest crop of wheat ever raised upon this place,

before Mr. Bolling commenced improving it, was 7,000 bushels. Mr. B.'s largest crop, was 17,000 bushels. The increase of one crop alone, is sufficient to pay for all the improvements of the fertility of the soil, and leave a handsome surplus. The wheat barn, which cost \$8,000, is 36 by 80 feet, three stories upon one side, besides a cockloft floor. To the same building is joined a sawmill, grist mill, plaster mill, and bone mill, besides the threshers and cornsheller, all of which are driven by a sixteenhorse-power engine, costing \$1,600, and all built in the most permanent and substantial manner.

The team force upon this place are 39 horses and mules, and 36 oxen—always runs twelve plows, three mules to each, and as deep as they can pull it through a free, clayey-loam soil, which is comparatively level. The other stock upon the place, 125 head of cattle, 150 of sheep, and 140 hogs.

Corn is planted from April 25th to May 5th,  $5\frac{1}{2}$  by  $1\frac{1}{4}$  feet apart, covered with a harrow, the lumps scraped off with a board, tended with double-shovel plow, and the corn stalks cut and spread like straw upon the surface to rot. But it is found that this system of shading the ground with straw, is more beneficial than a good dressing of manure without shade.  $(a)^1$ 

In summer, the stock are all grazed upon the appropriate parts of the place, under charge of a herdsman, much cheaper than they could be by a vexatious system of cross fences.

Mr. B. has 4,000 acres of timber land, which he offers for sale at the very low price of \$20 per acre. The timber, so near such a navigable river, would more than clear the land, and then the soil would be as good as that which he has in cultivation. The farm, including, say 500 acres of timber, is valued at about \$40 per acre,.....\$132,000

180 negroes, at \$300 average, each, ...... 54,000 125 head of cattle, at \$10, ..... 1,250

<sup>&</sup>lt;sup>1</sup> The editor identified this system: "(a) This system of shading the ground, is called 'Gurneyism,' a notice of which is given at p. 205, of our fifth volume."

150 sheep, at \$3,	450
140 hogs,	500
40 horses and mules, \$60,	2,400
6 ox carts, 3 tumbrils, 8 wagons, 2 log do.,	1,000
13 plows, at \$15,	195
Other tools,	1,500

\$193,295

The simple interest upon all this, at 7 per cent., would produce the snug little annual income of \$13,530.65. But the sales amounted to \$17,300, for corn and wheat last year, \$3,870 more than simple interest, from which, however, the current expenses must be deducted. The amount of these, I have not now on hand. Mr. B.'s people are all well fed and clothed, and have excellent houses, which, unlike the more southern fashion, are all scattered over the place—a plan that is, in some respects, preferable to that of congregating them in villages.

Many of the roads through the place are lined with red cedars, which make beautiful drives, and fine shades for man and beast, and add greatly to the beauty of the scene. The whole farm can be viewed from the observatory, on the barn, and including the river and opposite shore, covered with forest and underlaid with immense beds of shell marl, with Jamestown Island in the distance, it presents a scene of surpassing beauty. One of the curiosities of this old farm, is a box hedge, some ten or twelve rods long, twenty feet high, and very thick, which has exhibited the same appearance for the last hundred years.

Solon Robinson.

### LETTER TO LEILA ROBINSON

[Daily Cincinnati Gazette, June 13, 1849]

(Near) ALEXANDRIA, VA., Sunday, June 3, 1849.

Miss Leila Robinson:—My Dear Little Girl.—Not having an opportunity to get the letter written to Josephine, 1

<sup>&</sup>lt;sup>1</sup> Josephine Robinson, Leila's sister.

into the mail yet, I thought I would add one for you, though I have nothing very interesting to write. I suppose it will not be very interesting to you to hear me tell how this part of Virginia, that was once in a high state of improvement, has nearly all grown up again into forest. Just so it may be some day where you now live. All the houses rotten down, or burnt up, or tumbled into piles of ruins, and all the fences gone, and fields covered with trees, among which may be growing old apple trees, cherry trees, &c.; may be the condition of all the land around our present home, as it is in some parts of this country, that was once so rich and flourishing one hundred years ago.

There is one thing though, that never will be there as it is here—that is the old roads gullied and washed down the hills until it is like traveling in the bottom of a great ditch, sometimes 30 or 40 feet deep.

There is another thing here that never will be there—that is, old stone houses and mills, for this is a stony country. I traveled yesterday a mile up the side of a very rocky hill, almost a mountain—so narrow and difficult that it was troublesome passing other wagons. Now that is something that you never have seen, and can never see upon the prairie.

Mother can tell you something about such roads and rocky hills, for she has traveled over them across the Alleghany Mountains, from Philadelphia.

Yesterday I visited Mount Vernon, which you have read about, I suppose, for it was once the home of Washington, whose character I would have you study well in some of your books.

When he was alive, upon the way of going to his house, one passed some two miles through the well cultivated fields of his plantation, on each side of the road, and at nearly a mile from the house entered the "Mount Vernon gate," between two neat little buildings, called gate lodges, where lived some old negroes to open the gate, after old English fashion, when gentlemen's houses and

castles were walled in and guarded. From this outside gate a fine carriage road lead through a sort of wide lawn, or woodland pasture, over hill and vale up to the house. The entrance to this was flanked with a long row of brick houses for the servants, and offices of various kinds, that gave it a kind of fortified or guarded appearance. Passing between these you entered the great yard and came to the house, not before seen. This is of wood, two low stories high, and built in old style, having a fine view of the Potomac and across into Maryland. Everything around wore the air of neatness, taste and comfort, and prosperity. But oh, how melancholly it all looks now.

As I entered the premises from the "old Alexandria road," coming from the south, I passed through an old dilapidated gate, and along an avenue of brush and briars, grown up where was once fences. On either side lie broad waste fields in part, and part enclosed by a sort of three rail fence and brush fence, until at length I came to the original entrance into the park. Here still stand the lodges, without doors or windows, and there hangs the gate, but there is no use of shutting it, for on either side the frames are all gone, and the once smooth drive up to the house is now full of stones, mud and gullies, and it is necessary to leave the old road in places and seek a new track among the trees.

As we approach the out-posts, we find a part of the roof of the range of out-buildings fallen in, and the way chocked with rubbish and dirty, lazy negroes listlessly hanging about, and inside of the yard, shubbery and flowers no longer require the "notice to visiters" not to touch them, which was once painted upon boards and put up around the yard, but so long ago that the letters like the ancient glory of the house of Washington, are nearly all faded away, and gone with flowers and shrubbery.

Everything about looks dingy and time-worn and fast decaying, and it made such a melancholy impression upon my mind that I turned about my horses and hastened away as fast as I could drive.

The place is still occupied by one of the old family, Mr. John A. Washington, but is a most undesirable residence, because everybody, like myself, that comes within reach of the home and tomb of the great and good George Washington, feels it almost a sacred duty to make a pilgrimage to visit the sacred spot. The consequence is, that the house is constantly overrun with visiters; I have no doubt but that the family are literally "eaten out of house and home."

There has been some talk in former years of Congress buying the place. I think it should be done—otherwise it must inevitably go to ruin. I think it is a duty of the grateful and great American family, who love everything connected with the name and memory of their country's father, that Congress should buy his old home and tomb, and put it in a good state of repair, and keep it as near exactly as he left it as possible, for coming ages to look at and love, without feeling as all do now who visit it, grieved at the thought that unless the decaying hand of time is immediately arrested, we shall soon have to mourn over what was once the home of Washington.

It might be made the home of some old war-worn worthies, who should live there as pensioners of the government, and preserve the place in order, and show it to visiters, and from whom a display of hospitality would not be expected.

I am sorry to think our government so poor that they would hesitate to buy it, or so careless of the memory of Washington, as to see his house become the hooting place

¹John Augustine Washington, soldier, great-great-grandson of General Washington's brother, John Augustine, and on his mother's side the grandson of General Richard Henry Lee, born in Blakely, Jefferson County, Virginia, May 3, 1821; died September 13, 1861. Graduated from the University of Virginia, 1840. Served as aidede-camp, with the rank of lieutenant-colonel, on the staff of General Robert E. Lee, and was killed with a reconnoitering party near Rich Mountain, Virginia. Unable to keep up the Mount Vernon property, he sold it to the association of ladies which now has possession of it. Appletons' Cyclopædia of American Biography, 6:385 (1889).

of owls, or his tomb left alone—a deserted spot in the wilderness.

If there are any of the American family so wedded to their golden gods that they would hesitate on account of cost, I care not to know them. They are not congenial spirits with mine.

Now, my dear little daughter, you may think this a very uninteresting letter; but if you will preserve it until you grow old enough to read and understand more of American history, you will then read it with more interest.

I want you, my daughter, to study your map of the United States, so as to be able not only to point out where I now am, but to trace my long journey through the different States during the last eight months. Start upon the map from our house near the head of Lake Michigan, and down through the State of Indiana, Illinois, Missouri, Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, North Carolina, Virginia, and after this through Maryland, Delaware, Pennsylvania, New Jersey to New York. What a long drive for one to take all alone by himself, and what a diversity of people, soil, cultivation, and manners and customs I have seen within the last eight months. I have learned a great deal of the country, that I never could have learned from books. I continue to write letters to the American Agriculturist every month, but that paper cannot publish a tenth of the interesting matters that I have seen and might write about. I also write some letters to other papers, as often as I can find time, amid all my other engagements.

Perhaps, after I get home, I shall be able to write out a full account of my observations, and have them published in a book. I have no doubt but I could write one that would be very interesting, and one that perhaps would sell well and bring us a little money for our comfort and convenience. Many gentlemen have urged me to do so.

I have in my journey met a great many persons who

look upon me as an old acquaintance, from knowing me as a writer, and I have made a great many pleasant acquaintances, and been treated with a great deal of kindness, attention and hospitality, which is all very agreeable, but not so much so as it would be to be once more at home with you all in our happy and comfortable home.

But my sheet is full and I must close. I am your affectionate father, SOLON ROBINSON.

# WHAT DOES IT COST A POUND TO GROW COTTON? [Weekly National Intelligencer, June 9, 1849]

[June 4, 1849]

This is a question of vast importance to the United States. Who can answer it? Not one in ten of those that make it their staple crop, I venture to say; for cotton planters are as careless in this respect as though they were conducting a business of cents and dimes, instead of dollars and eagles.

I therefore propose to give you an extract from my notes, which I have been taking during my extensive agricultural tour the past winter and spring, not only to show the character of the information that I have been gathering, but in the hope that it may induce others to come out and give more and better information, or point out any errors in my statements.

The cost of making 331,136 pounds of cotton last year upon one of the best plantations of South Carolina was

¹ This article was reprinted in the Report of the Commissioner of Patents, 1849, pt. 2:309-12, which characterized the estimates as "defective and erroneous," but provocative of further study. An article on "Prospects of the Cotton Planters," De Bow's Review, 7:434-37 (November, 1849), summarizes it together with a criticism from the Columbia South Carolinian. According to the latter, Robinson's estimate of capital was incorrect and his interpretation of the figures unfair and inconsistent. They reckoned the profit on Colonel Williams' place as "about 12½ per cent. on his capital, and that too with the price of cotton placed as low as six cents in Charleston." The article was also reprinted, in part, in The Plough, the Loom, and the Anvil, 2:7 (July, 1849).

\$17,894.48, or a fraction over five cents and four mills a pound, including freight and commission, as well as interest upon a fair valuation of property.

The cost, exclusive of freight and commission, and including interest, of making 128,000 pounds upon the "cane brake lands of Alabama," last year, was \$6,676.80, a fraction over five cents and two mills a pound.

This is considered the richest cotton land in the world; and, although the crop was called a small one, it was probably about an average one.

The field hands upon this place numbered seventy-five, counting all over twelve years old, which gives a fraction less than four and one-third bales to each.

Now this crop has to be hauled over about twenty-five miles of the worst road in the world, when wet, as they usually are at the time the crop is ready to go to market, and then down the difficult and dangerous navigation of the Tombigbee river.

I am satisfied that these two crops give a better showing than three fourths of the cotton crops of the United States. My own opinion is, that whenever cotton is below six cents it does not pay interest upon the capital invested, except perhaps in some few cases.

Below I give a table of items of expense upon the first plantation mentioned. This is owned by Col. J. N. WILLIAMS, of Society Hill, and lies upon what is called the swamp lands of the Peedee river. These items are necessary to show that I have not stated the expense too high:

The capital consists of—
4200 acres of land (2,700 in cultivation) at
\$15 ......\$63,000 00

¹John Nicholas Williams, born at Society Hill, South Carolina, July 2, 1797; died April 12, 1861, at Baltimore. Son of David Rogerson Williams, planter, statesman, manufacturer, and governor of South Carolina, who died in 1830, leaving several large estates to John Nicholas. Interested in scientific agriculture and the manufacture of agricultural products. See Cook, Harvey Toliver, The Life and Legacy of David Rogerson Williams (New York, 1916).

## 242 INDIANA HISTORICAL COLLECTIONS

254 slaves at \$350 each, average old and young	89,900	00
60 mules and mares, and 1 jack, and 1	00,000	00
stud, average \$60	3,720	00
200 head of cattle, at \$10	2,000	
500 "hogs, at \$2	1,000	00
23 carts and 6 wagons	520	00
60 bull-tongue ploughs, 60 shaving do., 25		
turning do., 15 drill do., 15 harrows, at		
an average of \$1.50 each	262	
All other plantation tools estimated worth	1,000	00
Cash expenses	161 409	00
Cash expenses	101,402	
Interest is only counted on the five first items,		_
\$158,620, at 7 per cent	11,103	00
3980 yards Dundee bagging, at 16 cents, (5	11,100	00
yds. to a bale)	636	80
3184 lbs. of rope, at 6 cents	191	
Taxes on 254 slaves, at 76 cents	193	04
" land	70	00
Three overseers' wages	900	00
Medical attendance, \$1.25 per head	317	
Bill of yearly supply of iron, average	100	00
Ploughs and other tools purchased, annual	100	
average	100	00
200 pairs of shoes, \$175; annual supply of	275	ΛΛ
hats, \$100  Bill of cotton and woollen cloth	810	
100 cotton comforters, in lieu of bed blan-	010	00
kets	125	00
100 oil-cloth capotes, (New York cost)		50
20 small woollen blankets for infants		00
Calico dress and handkerchief for each		
woman and girl, (extra of other cloth-		
ing)	82	00
Christmas presents, given in lieu of "negro		
crop"	175	00

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50 sacks of salt	80	00
Annual average outlay for iron and wood	100	00
work for carts and wagons	100	
Lime and plaster bought last year	194	
Annual average outlay for gin, belts, &c		00
400 gallons of molasses	100	00
3 kegs of tobacco, \$60; 2 bbls. of flour, \$10	70	00
5/8 of a cent a pound on cotton for freight		
and commission	2,069	60
\$	17,894	48
The crop of cotton at 6 cents will amount to\$	19,868	<del></del>
The crop of cotton at 6 cents will amount to\$ Col. Williams has also credited this place w	19,868	<del></del>
The crop of cotton at 6 cents will amount to\$ Col. Williams has also credited this place w ditional items drawn from it:	19,868	<del></del>
The crop of cotton at 6 cents will amount to\$  Col. Williams has also credited this place w ditional items drawn from it:  13500 lbs. of bacon, taken for home place and	19,868 ith the	16 ad-
The crop of cotton at 6 cents will amount to\$  Col. Williams has also credited this place w ditional items drawn from it:  13500 lbs. of bacon, taken for home place and factory	19,868 ith the 675	16 ad-
The crop of cotton at 6 cents will amount to\$ Col. Williams has also credited this place w ditional items drawn from it: 13500 lbs. of bacon, taken for home place and factory	19,868 ith the	16 ad-
The crop of cotton at 6 cents will amount to\$  Col. Williams has also credited this place w ditional items drawn from it:  13500 lbs. of bacon, taken for home place and factory	19,868 ith the 675	16 ad-
The crop of cotton at 6 cents will amount to\$ Col. Williams has also credited this place w ditional items drawn from it: 13500 lbs. of bacon, taken for home place and factory	19,868 ith the 675	16 ad- 00 00
The crop of cotton at 6 cents will amount to\$ Col. Williams has also credited this place w ditional items drawn from it: 13500 lbs. of bacon, taken for home place and factory	19,868 ith the 675 500	16 ad-
The crop of cotton at 6 cents will amount to\$ Col. Williams has also credited this place w ditional items drawn from it: 13500 lbs. of bacon, taken for home place and factory	19,868 ith the 675 500 550	16 ad- 00 00 00 00

\$ 22,298 16

125 00

Profits over and above interest and expense upon this total are \$4,403.68.

Mutton and wool for home use and sales....

Counting cotton only at six cents, profits are \$1,973.68; counting it at seven cents, (\$23,179.52,) and profits are \$5,285.04. It is proper to state that part of the crop was sold at seven cents, and it *may* average that.

Now, it must be borne in mind that this is one of the best plantations, as well in soil as management, and that this was an extraordinary good crop. It must also be assumed that the land will continue to maintain its fertility and value, and that the same hands will keep the

buildings in repair, as no allowance is made in the expense account for such repairs, or there will be a loss under that head.

Most of the corn and meal credited comes from a toll mill on the place. All the cloth and shoes are manufactured by Col. Williams, but upon a distinct place.

The place mentioned in Alabama belongs to ROBERT MONTAGUE, Esq., of Marengo county. The items of valuation are:

\$ 27 500 00

1100 acres of land at \$25

1100 acres of land, at \$25	27,000	UU
120 slaves, at \$400	48,000	00
4 wagons	400	00
5 yoke of oxen, at \$30	150	00
30 mules and horses, at \$75	2,250	00
4000 bu. corn on hand for plantation use, at		
35 cts	1,400	00
Fodder and oats do	200	00
40 head of cattle, at \$5 do	200	00
70 "sheep, at \$2 do	140	00
250 " hogs do	600	00
20000 lbs. bacon and pork do	1,000	00
Ploughs and all other tools do	500	00
- \$ -	82,240	00
Interest on capital at 7 per cent\$	5,756	80
Interest on capital at 7 per cent\$ Cash expenses, taxes, average	5,756 100	
Cash expenses, taxes, average	-	
Cash expenses, taxes, average Blankets, hats, and shoes, (other clothing all	-	00
Cash expenses, taxes, average	100	00
Cash expenses, taxes, average  Blankets, hats, and shoes, (other clothing all home-made)  Medical bill, average not exceeding	100 250	00
Cash expenses, taxes, average  Blankets, hats, and shoes, (other clothing all home-made)  Medical bill, average not exceeding	100 250 40	00
Cash expenses, taxes, average  Blankets, hats, and shoes, (other clothing all home-made)  Medical bill, average not exceeding	100 250 40	00 00 00 00

<sup>&</sup>lt;sup>1</sup>Robert Montague, member of a well-known family in Virginia, moved to Marengo County, Alabama, in 1830. Like many other immigrants, found his activities handicapped by the panic of 1837. About 1850, sold his lands and moved to Texas. Letter of W. H. Tayloe, Uniontown, Alabama, to Herbert A. Kellar, May 12, 1936.

Average expense yearly for machinery re-		
pairs	20	00
Bagging and rope	350	00
-		
\$	6,676	80

This crop, (28,000 pounds,) at six cents nett, will leave a balance of \$1,004.20, which is just about enough to pay the owner common wages of an overseer, which business he attends to himself.

Now, while there may be a few better places, there are thousands not near as good in all the cotton-growing region.

I could go on at considerable length to give other items about cotton, as well as similar information about sugar, &c., but my time nor your space will not allow it now.

I would remark, however, that I am publishing a series of letters in the American Agriculturist, published in New York, for which I am the travelling correspondent. It is possible also that I may publish the observations of my tour in a more extended and permanent form, whenever I get time to write out all the notes that I have taken.

Any thing that I can do to add to the agricultural information of my country I have a strong desire to do.

I am, most respectfully, &c.

SOLON ROBINSON.

WASHINGTON, JUNE 4, 1849.

### VISIT TO COL. CAPRON'S.

[New York American Agriculturist, 8:250; Aug., 1849]

[June 7, 1849]

COL. H. CAPRON, of this place, is one of the most intelligent, and his works show him to be one of the

<sup>1</sup> Horace Capron, agriculturist, born Attleboro, Massachusetts, August 31, 1804; died February 22, 1885. Failing to receive an appointment to West Point, turned to cotton manufacturing, in

most enterprising improvers that I have ever met with. He has now growing, one of the best fields of wheat I ever saw; and this upon land that would not produce five bushels to the acre, a few years ago. Some of his cattle are equal to any northern herd. He has, also, some most superb horses, and most decidedly the best mule teams that I ever saw in harness. He keeps 80 cows, the milk of which being made from his most excessively luxuriant clover fields, commands the highest price, (13 cents per gallon,) in the Baltimore market. His barn and stables, as well as all the arrangements about the dairy, and as every other of his farming operations, are a little superior to anything else in the south, and, in my opinion, equal to anything in any country.

Nearly all of his land that required it, Col. C. has under-drained, making use of hard bricks to form the drains. The benefit of draining some pieces of land that did not, to one unacquainted with the effect, seem to require such an improvement, have been wonderful. Indeed, all his operations have been so. For he has not only, by his own energy, built up a large manufacturing village, but has shown to all the people around him, that these old, barren, tobacco fields, can be made productive; and, at the same time, be made to pay all cost and produce a profit.

Solon Robinson.

Laurel Factory, Md., June 7th, 1849.

which his father and brother were extensively engaged. In 1829 became superintendent of the cotton factory of James Buchanan and Company in Maryland. In 1836 erected and became superintendent of the factory in Laurel which acquired a reputation as a model factory. Also began farming on an extensive scale. Later moved to Illinois. Served as United States commissioner of agriculture, 1867-1871, as commissioner and chief adviser of Japanese government in development and settlement of island of Hokkaido, 1871-1875. See sketch in *Dictionary of American Biography*, 3:484-85.

### A FLIGHT THROUGH CONNECTICUT.

[New York American Agriculturist, 8:321-22; Oct., 1849]

[July 10, 1849]

IMMEDIATELY after leaving the noise and confusion of that great "Babel," known as New York, and even before I was fairly out of the purlieus, I saw large tracts of land, that, notwithstanding its iron-bound, rocky nature, if cultivated, even with a tithe of the care that John Chinaman bestows upon his soil, it might be made to yield a good support to thousands of the poor creatures that are dragging out a miserable existence in the filthy courts and alleys of the city; while here, within an hour's walk, lie thousands of acres of productive soil, where the healthy atmosphere is such as God gives to the mountaineer, instead of that made for human lungs by the inhuman folly of man in the dark, damp, city cellars, where the spirit of cholera finds the seeds already sown that will produce him an abundant crop.

Much of the land above referred to is covered with bushes, or miserable little half-starved patches of cultivation, or with shanties that are a degree, at least, below the western log cabin. And this is within the sound of the City-Hall bell. And this is "the age of agricultural improvement, is it? The country where we give thousands of dollars annually in premiums for the exhibition of the fattest bulls and boars, and daily proclaim to the world what a great improving agricultural country this is!

But let us proceed. What do we see along the line of railroad towards New Haven? Why the same old stone walls and rickety rail fences, bush pastures, bog meadows, alder swamps, stony fields, and scanty, because unmanured, crops, that were to be seen in the same places fifty years ago. Have these people ever heard of the fact that they might purchase an article called "guano," which has a similar effect upon land that is attributed to manure?

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Beyond New Haven, the road passes through several miles of a poor sandy plain, which looks as though it belonged to the "piney-woods" region of South Carolina. rather than to Connecticut. This is perhaps too sterile to be improved with profit; yet, it is a question with me, whether more profit, if we count long life and good health anything, might not be made from this sandy waste, than from some of the rich prairies and bottoms, of the great west. California included. In fact, notwithstanding that agriculture, in general, seems to have been conducted in Connecticut for a century or two, upon the same identical "American system" of skin, shave, and waste the soil, and "do as father did," yet every now and then we pass a spot where everything around shows that the light of science, yea, agricultural science, has penetrated far enough to show that, if men would, they might make all of these old, sterile, fields not only productive, but actually more surely profitable than any other employment. But the truth is, and cannot or should not be disguised, the farmers of Connecticut, as a body, have not, do not, and I fear will not, even read anything that is calculated to inform their minds upon the subject of improving and renovating their old worn-out soil.

I left the cars at Meriden, and took a tour through the state eastward, making many stops during a week, and in all the time I never saw nor heard of but one subscriber to an agricultural paper, and he was a gunsmith instead of a farmer. I saw many men mowing many acres that would not produce 500 lbs. of hay to the acre; and at the same time, it was self-evident to me, that a moderate expenditure of labor in underdraining, grubbing up bushes and bogs, straightening channels of streams, carrying muck from swamps to gravelly knolls. and a little outlay for manure, lime, guano, &c., would make the same land produce two tons to the acre: and that of a far better quality—though the blackberry crop might be lessened. My attention was particularly drawn to one "meadow," (swamp,) which I have known for more than thirty years, that annually produces about half or three quarters of a ton of "bog-meadow hav" per acre. which has been carried out upon poles every one of those years; for no animal can travel over it. I wish I could recount the number of cattle that have been mired and lost, while trying to get in, to crop the early spring grass upon that little green spot. It contains about seven acres, in an oval shape, surrounded by rocky hills, and was undoubtedly once a shallow pond; for the muck is from one foot to four feet deep, lying upon a hard bottom. It is not apparently fed by springs, but in a wet time is filled with water from the surrounding hills, which, when it rises above the surface. runs off into a little brook at the lower end. Now this is the only level, smooth piece of mowing land upon the farm, and it has been mowed and "poled" probably more than half a century. Let us put the account into figures, in the shape of debit and credit.

Dr.
0.00
140.00
21.00
125.00
05 00
25.00
9.60

### Contra.

Continu.	
50 crops of hay, 5 tons a year, at \$5 per ton, 50 crops of early spring grass, when feed is scarce, for pasture, very valuable, but good for nothing, because cattle can't get at it, Fall feed, a little nipping around the edges, where the ground is a little dry, and grass ditto, not worth much; but let it balance the	0.00
hay poles,	
and boots lost while poling it out,  Thinking what a nice piece of meadow that would be if it was drained, and having a "darn'd good mind to try it" every year for 50 years, is certainly worth four-and-sixpence a	25.00
year, Connecticut currency, and cheap at that,	37.00
	\$322.10 320.60
Balance in favor of the "Old Pond Meadow,"	\$ 1.50
Now let us suppose that this land had been juddrained, and how would the figures look? Why thing like this:	
THE OLD POND MEADOW,	Dr.
To one month's labor in cutting a ditch through the centre, and around the edges, and about 20	
rods to the brook,	30
them, say \$5 per acre,	35
To breaking up and seeding after the land becomes dry, say \$3 per acre,	21
To lime, ashes, and manure, average for 50 years, say \$3 per acre each year,	1,050
-	1,136
	_,

Notwithstanding this sum looks so enormous, let us see if the *per contra* will not show a better balance than the preceding account.

#### Contra.

For an average of 2 tons per acre of Timothy, red-top, and clover hay, upon seven acres for 50 years, (a low estimate, supposing it is all	
the time in grass, and that is 700 tons,) worth	
\$10 a ton,\$	7,000
The pasturage is worth 50 cents per acre per an-	Í
num,	175
The dirt from the ditches and ashes from the	
bogs, to put upon the old gravelly hills around,	
is worth nearly as much as it cost to dig it, but	
, , , , , , , , , , , , , , , , , , ,	25
say only	25
_	
•	7 200

\$ 7,200

The balance then will be \$6,064 in favor of the improvement.

In fact, I have seen, during the present trip, a hundred just such tracts of land as the one described above, so far as facility of draining is concerned, and at present worthless. Now, is it not singular, shrewd as these Yankees are, that they should continue, generation after generation, to pole out the hay from their old bog meadows, and plow and plant some of the richest natural soil upon their farms, that does not produce half a fair crop, for want of a few under drains, and that, too, in many places where the surface is covered with loose stones, that would serve admirably well for materials to build the drains with? But these people do not read. Nay, they do not plow. "Do not plow?" Nay, they do not plow. little scratching that they give the land is unworthy of name of plowing. They will actually argue, that to plow deep will ruin the land, as it turns up the poor, unproductive earth. As for subsoil plowing, it is to them a sealed volume. We read in books and newspapers, daily, of the high state of improvements in New England. And in all the villages and manufacturing towns, and upon a great many farms, there is an air of thrift, neatness, and a sort of gentility of appearance, that gives character to the whole country. Then, again, among those who continue generation after generation, to pole out the old bog-meadow hay, and scratch over the bare surface of the gravel hills, or mow over the old fields, "three clips to a handful," there is an unceasing, never-tiring industry; and that, upon any soil, will make a show of thrift. If well directed into an improving channel that would constantly fertilize the soil, what a result would be produced!

I hope my Connecticut friends will not think that I use the lash too freely. I think they need it. They are, as a body, behind the age in agricultural improvements. Their children are all taught to read. But can there be found

<sup>1</sup> The answer of A Connecticut Farmer, of Farmington, to this "unwarranted attack" appeared in the American Agriculturist, 9:19 (January, 1850). He said in part: "I have delayed this communication to collect statistics of this season's crops . . . in proof . . . that Mr. Robinson has done us injustice. Ours is an agricultural town, and we have had as large a proportion of exhausted land . . . as any section of the State. This, where it has been sold at all, has been sold as low as \$3 per acre within the last twenty years, and there are portions . . . now . . . worth to cultivate from \$40 to \$50 per acre; and . . . still improving. Our grass lands . . . produce on the average four tons to the acre, both crops, (we always cut two crops per year,) one field that was actually weighed, produced over five tons to the acre. . . . There were three acres of oats, averaged 86 bushels per acre, one acre of which being limed produced 92 bushels; of corn. . . . One single acre produced 136 bushels: one piece of three acres produced 116% bushels per acre. ... Another piece of six acres, one acre of which was measured, produced 102 bushels, a fair average of the whole. In the same field were three acres of potatoes, which produced something over 600 bushels sound tubers. .....

".... Our matched cattle sell at from three to four years of age, from 125 to 150 dollars per yoke; we can show native cows (which if Mr. Robinson were to see, he would probably cite as examples of slovenly breeding,) from whose milk at grass alone, 2 lbs. butter per day are made."

this day in any one of her district school houses, one single book calculated to teach their children how to cultivate the soil? No! for they think that it would be "book farming." The father thinks no one ever knew so much about farming as himself, and the son never conceived the idea that there was any art to learn, nor that any other person besides father could ever teach him anything about it. "Learn farming in school! Ha, ha! who ever heard of such a thing."

If Connecticut had nothing but her soil to depend upon to insure her prosperity, her citizens would have to learn agricultural improvement, or her people would themselves deteriorate. But let us rest a month, and then, by your leave, I will continue my trip to Boston.

July 10th, 1849.

SOLON ROBINSON.

## NEGRO SLAVERY AT THE SOUTH.

[De Bow's Review, 7:206-25, 379-89; Sep. and Nov., 1849]

[August ?, 1849]

EARLY HISTORY OF NEGRO SLAVERY; SLAVERY IN THE STATES; THE BIBLE QUESTION OF SLAVERY; PHYSICAL CHARACTERISTICS OF THE NEGRO; SAFETY OF THE SLAVE INSTITUTION; FIDELITY OF NEGRO SLAVES; SLAVERY COMPARED WITH ENGLISH POOR LABOR; MISERY OF BRITISH OPERATIVES, ETC.<sup>1</sup>

I would premise, that my object is neither to advocate slavery or its abolition; but rather to give a plain narra-

¹ Robinson's article on slavery was introduced as follows: "Coming from the pen of a northern man, born and educated amid influences in the highest degree obnoxous to our institutions and policy, it has a peculiar value. The author has read almost every thing published upon the subject, and availed himself of the light afforded in one general acknowledgment. He has also traveled extensively at the South . . . and proved himself in most respects an accurate observer and faithful witness. In a periodical like ours, it is important to give full and particular information in regard to the institution of slavery, so important, as it is, in the destinies of nearly half the States of the Union."

tion of facts, from which every one may draw his own conclusions.

First, then, let me give a short historical view of the origin of what a majority of the citizens of the United States, as well where slavery exists as where it does not, regard a great evil.

Perhaps every one is aware that negro slavery commenced in this country while we were but a colony of Great Britain, and at a time when few, if any, thought it was such a henious sin as it is now denounced in some quarters, or that it would ever reach its present magnitude. Could the wise fathers who framed our national constitution, have had a prospective vision of the present, it is probable they would have inserted some provision to prevent its extension.\* But so little did they then fear,

\* The first slaves introduced, were twenty in number, from a Dutch man-of-war from the coast of Guinea. They were landed for sale in the colony of Virginia, on James River, in August, 1620, 225 years ago. Negroes constituted an article of traffic, more or less, in all the colonies. At the time of the Declaration of Independence, in 1776, the whole number was estimated at 500,000, viz:

In	Massachusetts,	3,500
	Rhode Island,	4,373
	Connecticut,	6,000
	New Hampshire,	620
	New York,	15,000
	New Jersey,	7,600
	Pennsylvania,	10,000
	Delaware,	9,000
	Maryland,	80,000
	Virginia,	165,000
	N. Carolina,	75,000
	S. Carolina,	110,000
	Georgia,	16,000
	Total in 1776	502,132

Since then slavery has been abolished in the first seven States above named. The census of 1790 exhibited 697,897 slaves, and 59,460 free persons of color.

In 1800,	slaves	 893,041
1810,		
1820,		

that the importation of slaves was permitted until the year 1808, about the time it was also prohibited by Great Britain. Although the citizens of that government are now harsh against us for permitting the existence of slavery in our republic, it ought to be borne in mind, that it was Britain who fixed the institution so indelibly upon us. She began the traffic in the reign of Queen Elizabeth. though slavery had undoubtedly existed in some form from the earliest history of that nation. In fact, it has existed from the earliest periods of history, and I have no doubt will continue to exist to its latest period. Notwithstanding the importation of negroes is prohibited by nearly all the civilized nations of the earth, it is still carried on in a contraband manner, to an enormous extent. It is estimated that 40,000 slaves annually leave the coast of Africa. It is not likely that many of them ever reach the United States. Cuba. Porto Rico and Brazil, being the great slave emporiums of the present day; but we undoubtedly feel the effects of the trade, for were it not for that source of supply, these countries would draw the surplus from ours, in spite of all laws that might be enacted to prevent it.

For my own part, I have no doubt that while the negro continues to exist, he will continue to be enslaved by the white man, as it has been for almost unknown ages; for it is a fact, that long before the time when European ships first visited the coast of Africa, the negroes had been carried away, by the Arabian caravans, to serve the pale faces of the North. Would it not be well to inquire why the negro race has always been subjected to the condition of slaves by the whites?

And to avoid the charge of plagiarism, let me here state that I shall quote many items from various authors

1830,	"	 2,009,031
1840,	66	 2,487,455

The importation of slaves has been prohibited since 1808; consequently, the addition ascertained every census, is from natural increase.

who have treated upon this subject, and give them as authority, once for all.

"It has long been a favorite theory of many philosophers, that the negro races are naturally inferior in point of intellect, and do not possess the same capacity for improvement as the Europeans, or people of Caucasian variety. This supposition, however, has been vehemently denied, and it has been contended, over and over again, that the peculiar circumstances under which they have been placed sufficiently account for the condition of the Africans—for their want of a literature, and their degraded and low scale of civilization, and brutal and savage existence.

"That great weight should be attached to these circumstances, I am willing to admit, but wholly deny they have produced the existing state of things. It is a well known historical fact, that ancient Egypt was, at one period, the principal seat of science, literature, arts and civilization. and that the various nations or tribes of the African race were in close contact, and had a pretty extensive intercourse, not only with the Egyptians, but also with the Phœnicians, and afterward with the Romans. they profit by this association? Literally, nothing. For while the then almost equally barbarous people of Greece, Asia Minor and Magna Græcia, raised themselves, in a comparatively brief period, to the highest civilization and refinement, the negro race of Africa continues, with-but one single solitary exception, down even to the present day, immersed in the greatest barbarism.

"It is not possible that, during the space of 3 or 4,000 years, opportunities have not been afforded some of them to make some slight advances in the scale of human improvement. Is there any proof that they have had the sagacity that is inherent in the Caucasian family, to profit by contact with more favored nations?

"It appears to me a fact, that Africa has not produced a single name worthy to rank with the heroes and sages of the world. "Although wrapt in the darkest superstition and worship of idols, we look in vain for the honors and public gratitude which other rude, though improving, nations are wont to bestow upon departed heroes, legislators, and authors of important discoveries in the arts."

Because a few of the negroes among us do occasionally exhibit bright intellectual qualities, many good philanthropists have been led to believe that the whole race might be elevated to the same standard, and have come blindly to the opinion that the first great necessary step to bring about this wonderful result, will be to declare them FREE, and insist that they are EQUAL to the white race.

Are these good but erring men aware, that there is almost as much difference between the different tribes of the negro race as there is between the blacks and whites?

For instance, the Jolofs seem to be almost a distinct race of negroes, and have been a comparatively civilized people from the era of their first discovery by the Portuguese.

"Those of Guber and Hausa, where a considerable degree of civilization has long existed, are, perhaps, the finest race of genuine negroes in Africa, unless the Jolofs are such, and should be excepted."

By slaveholders, the Coromantees are esteemed the most intelligent and most capable of being taught; making trusty and good drivers to urge on those of a more sluggish nature; but very impatient and turbulent at being driven themselves. These negroes are of a dingy copper color; their lips and high cheek bones, like the North American Indians. Some of them will lay down and die, rather than yield to be driven to work by the whip. In their native land they are never kept as slaves, on account of their sulkiness.

The next in the scale of value, or perhaps they are equal, are the Congos. They are tall, straight, bright copper-colored, smooth skin, small round hands, and make good imitating mechanics; in that respect, like the

Chinese. They are from the south coast of West Africa, between south latitude 4° and 15°; a district of country that contains the kingdoms of Loango, Congo, Angola, Matamba, and Buengula, which was discovered by the Portuguese, in 1481, ever since which they have made slaves and converts of the inhabitants, the greater portion of whom, notwithstanding their contact with the numerous Portuguese settlements in their country, and the strenuous efforts of the missionaries for more than three centuries, still remain sunk in the grossest barbarism and idolatry, going almost naked, living like beasts, and worshiping, if worship it can be called, the sun, moon, stars and hideous beasts and reptiles. Much of the country, back from the coast, is desert and inhabited by elephants, leopards, monkeys, monstrous serpents, and terrible crocodiles.

This country is sometimes called Lower Guinea, and was formerly a great slave mart for Christians engaged in the traffic, and is the coast from which the great trade of the present day is still carried on—sometimes by citizens of the United States.

It is from this country that abominable, noisy domestic fowl, known as the Guinea hen, was brought. It is a country so infested with venomous serpents, some of which are more than thirty feet in length, and reptiles, and insects, that it is unfit for the residence of human beings. The negroes from that coast, when brought here and left in a state of slavery, are not found sighing to return to their own native land.

We are sometimes wont to complain of the little ant in this country, while in Guinea they exist in such quantities that they drive the inhabitants from their huts, and have been known to destroy the carcass of an ox in one night, and often would destroy the debilitated sick, if not guarded against.

The Eboes and Mongullas are jet black, medium height, chuckle-headed, thick lips, hearty eaters, inclined to grow fat, seldom possessing any mechanical skill, though generally tractable and patient, lazy slaves, needing to be driven to work, and, unlike the Coromantees, only to be kept at it by driving. They are capable of great endurance under a burning sun.

The Ashantees, who inhabit an interior portion of the north of Africa, have ever been the most powerful and warlike tribe of negroes on that continent. They have frequently defied the scientific and destructive means of European warfare, and during the prevalence of the uncontrolled slave trade, were the principal instruments to supply the hordes of slaves that were shipped from the upper Guinea coast. It was through the agency of this tribe that Spain derived her supplies to fill the celebrated Assiento Contracts she made with Portugal, France and England, to supply their American colonies with negro slaves.

But notwithstanding their power and warlike disposition, many of them suffered the same fate they were so anxious to inflict upon their weaker neighbors—their Christian allies never hesitating to purchase whatever was offered with a black skin, without inquiring whether he was friend or foe.

The Ashantees, Foutis, Sulemas and Dahomans, are similar in leading characteristics as slaves to the Eboes and Mongullas.

There are also some tribes of African negroes that are so low in the scale of civilization, that they are rejected as worthless, even by the West India planter, where they are not even required to learn the art of any thing more scientific than digging up the ground with a hoe, to prepare it for the crop of sugar-cane; for thus thousands of acres are prepared where the use of a plow is unknown.

These beings—I can hardly call them human—in their native country, live in the wild jungles, without fire, without clothing of any kind and without habitations, and upon such food as nature provides for them without labor. They are about four feet high, the head strongly resembling in shape that of the ourang-outang, and having a profusion of hair on the body and limbs.

I was lately told by an intelligent gentleman, that he knew three of them on one plantation in the West Indies, who never could be learned to perform any labor, and their whole employment was catching rats; which they did in their own way; and the strongest incitement to which was the fact that they were allowed the privilege of living most luxuriantly upon all they caught—actually rejecting their regular allowance of good bread and meat for the more palatable dish of roasted rats. So much for taste.

Another instance was related to me by a very kind hearted friend of mine, now residing in Illinois, of an attempt which he made some years ago in Florida, to tame one of these wild negroes, by treating and feeding him with great care and kindness, but before he had fairly accomplished the task, his ward escaped his care and was not seen again for several weeks, when he was found naked as in his native wilds, basking in the broiling sun upon the burning sandy beach, where he had been holding a feast upon the stinking carcass of a porpoise that had drifted up in a storm. So much again for taste.

Can such beings be civilized—christianized—rationalized? Is it sinning against the light of knowledge and truth that illuminates the nineteenth century, to compel such beings to be clothed, and fed, and instructed, and to perform useful labor, in civilized society?

I hope I shall not be accused by any of my abolition friends, many of whom I much esteem—although I must think that their minds are a little morbid upon this subject—as being an advocate of slavery. I am only stating facts and asking questions. Let those answer them who can—I do not intend to try.

I have often been asked whether I believed that all the varieties of the human family, known to exist at this time, sprung from one source. That is another question I do not intend to answer. Let all think for themselves—and whatever conclusion they may come to on this point, it cannot in anywise affect the question as to the com-

parative intelligence of the white and black races of earth's inhabitants.

"The same circumstances that are supposed by those who contend for the original identity of the races to have so greatly affected their appearance and physical capacities, could hardly fail to have an equally powerful influence over their mental faculties.

"This, in fact, is substantially admitted by Dr. Pritchard, who has ably contended for their common origin and equality of intellectual faculties.

"He says: 'The tribes in whose prevalent conformation the negro type is discernible in an exaggerated degree, are uniformly in the lowest stage of human society. They are either ferocious savages, or stupid, sensual and indolent. Such are the Papals, Bulloms, and other rude hordes on the coast of Western Guinea, and many tribes near the slave coast and Bight of Benin—countries where the slave trade has been carried on to the greatest extent, and has exercised its usual baneful influence.'"

And he might have added that the same characteristics were to be found among tribes living far in the interior of the continent, who never had felt the effects of that baleful influence.

He also says, that wherever we hear of a negro state, the inhabitants of which have attained any considerable degree of improvement in their social condition, we always find that their physical characters deviate considerably from the strongly marked or exaggerated type of the negro.

This is the very point for which I contend, and the facts here exhibited, go far to prove a gradually ascending scale, from a race but one remove above the ourangoutang, up to the highest grade of Caucasian intellect; and that the distinguishing features of the negro race in a strongly marked degree, are uniformly associated with the lowest state of barbarism; and that, as they advance from this strongly marked type, we find a greater degree of civilization and improvement.

The inevitable conclusion is, that every variety of the negro type, which comprises the inhabitants of almost all central Africa, is indicative of mental inferiority; and that ferocity and stupidity are the characteristics of those tribes in which the peculiar negro features are found most developed.

Now if this is a correct statement, what more could be said to show most conclusively, the radical inferiority of

the great bulk of the African people.

But let us not form our opinion on their configuration and appearance alone, but on the fact, that while numberless European and Asiatic nations have attained to a high state of civilization, they continue, with few exceptions, in nearly a primeval barbarism.

It is in vain to contend that this is the result of the unfavorable circumstances under which they have been placed. The history of our own country-yea, the history of almost every town that has been built, and every farm that has been opened in the western wilderness proves that a people naturally endowed with intelligence and an enterprising spirit, contend against unfavorable circumstance, until they actually create more favorable ones for themselves.

But the Africans have never shown to the world that they possessed any considerable degree of enterprise or invention, or any wish to distinguish themselves in the arts and sciences of peace or war.

From the remotest antiquity to the present day, a portion of their race have been hewers of wood and drawers of water for others, and whether under the name of slave, servant, or hireling, they will so continue, so long as the distinguishing color between the two races shall exist; for, in all this time, they have made so little progress toward the art of being their own masters in a civilized state, that the only legitimate inference is, they are incapable of making it—that, as a body, they are incapable of living in a civilized state, only in the condition of servitude to their more highly intellectually-favored fellow men.

And now let us inquire if there is not some natural, physical reason, by which to account for this fact.

Let me inquire of those who read and believe in the Bible, if they cannot find a reason why the descendants of Ham are servants to the descendants of Shem and Japheth, recorded in the 25th, 26th and 27th verses of the ninth chapter of Genesis.

"But if any one should wish to know why the African can expose his naked skin to a tropical sun without suffering pain or inconvenience; why, after a fever leaves him, rejecting soups, teas, and light diet, he eats through choice, and with impunity, a full meal of fat pork and corn bread, and then voluntarily sits in the sun a few hours, as if to promote its digestion, and the next day goes cheerfully to his labor; why he has no revenge for being subjected to the indignity of corporeal chastisement: why he feels a perfect contempt for those persons of the white race, who put themselves on terms of equality and familiarity with him: why he loves those who exercise a firm and discreet authority over him; why he is turbulent, refractory and discontented, under every other government than that which concentrates all the attributes of power in a single individual; and why, when freed from the restraints of arbitrary power, he becomes indolent, vicious and intemperate, and relapses into barbarism—he may find the cause of all these, and many more peculiarities of his character, by closely searching into the anatomy and physiology of his brain, nerves and vital organs. For the knife of the scientific anatomist in his deep research after this cause, has demonstrated that the brain proper, is smaller in them than in other races of men, and that the convolutions seen on the hemisphere of the brain, are less close, less deep and numerous: that the occipital foramen, the medulla oblongata and spinal marrow, and the nerves of organic life are much largerparticularly those connected with digestion and secretion. And all observation proves, that the pleasures of these people are not so much those of reflection, as of sense. The difference in organization is so great, that it has led many wise men to believe that the Ethiopian race was a distinct species of mankind. Others as firmly believe that the anatomical and physiological peculiarities discovered and known to exist in this race of human beings, will be found to be an exact duplicate of that portion of Scripture which foretells the doom of Canaan to servitude.

All history and science go to prove, that the negro is the slave of his appetites and sensual propensities, and must of necessity be so from his anatomical structure. The nerves of the spinal marrow, and the abdominal viscera, being more voluminous than in other races, and the brain being ten per cent. less in volume and weight, he is from necessity, more under the influence of his instincts, appetites, and animality, than other races of men, and has less power of reflective faculties.

The deficiency of intellect is not so great as is the want of a balance between his animality and intellectuality. It is the predominating animality that chains his mind to the worst of slavery—slavery to himself and his appetites—and makes him savage in his habits when left to himself. His mind being thus depressed by the peculiar formation of the nerves of organic life, nothing but arbitrary power can restrain the excesses of his animal nature: for he has not the power within himself.

It is undeniably true, that nothing but the compulsory power of a master, has ever made him lead a life of industry, temperance and order: and it is my firm belief, that nothing else has or ever will convert the savage negro into a civilized being.

Withdraw that power, and the present race of peaceful, happy and contented slaves of the United States, would relapse into barbarism. All history shows, that, in a state of freedom from the control of the white man, he is not a free agent to choose the good from the evil; but under the control of that government, which, if God ever ordained one single thing in the Old Testament, he or-

dained for the good of the Canaanite race; the excesses of his animality are kept in restraint, and he is compelled to lead an industrious, sober life, and certainly a more happy one than he would if he was left to the free indulgences of his indolent, savage nature.

I am not maintaining that it is not, but on the contrary will offer evidence by and bye to show that slavery is, an *evil*, as it exists at present in the U. S., but the evil falls upon Japheth and not upon Ham—the latter is fulfilling a decree of the Bible; while the former is punished for his sins, while carrying out that very decree.

Permit me here to inquire whether the arts of the abolitionists of the present day, are not tending to make more infidels than all the infidel publications of all the Voltaires, Paynes, Wrights and Owens, that have ever been printed. For they are generally professing Christians, whose every act should tend toward convincing all who are not so, that they believe in the words of that book which they profess to believe. Now, I have often heard the argument made use of by those who are opposed to abolition, though not advocates of slavery, that if, as abolitionists are wont to assert, "slavery is a most damning sin," then is the Bible false; for, as they contend, and as I am bound to believe myself, slavery was in Old Testament times, an institution of God's own ordering—that human beings were bought and sold and held in bondage. Even old Abraham had servants, and Joshua made hewers of wood and drawers of water of the conquered tribes of Canaan. And Noah declared, as by inspiration, that the descendants of Ham should be the servants of the descendants of his brothers. Is it for man to say he shall not?

And if it should be denied that the African race are the descendants of Ham, then again will it be said that the truth of the Bible is denied.

The word Canaan is derived from a Hebrew verb, that truly and literally means, to submit himself, to bend the knee—which is indicative of his natural qualifications for

the duties assigned him, to be a "servant of servants," as it was ordained that he should be, 4,000 years ago. And by a peculiar organization of both body and mind, his condition of servitude is a condition of contentment and happiness, even while enduring a degree of labor under the burning sun of a southern clime, that would annihilate his white brethren.

It is a fact that the negro is provided with an additional anatomical contrivance in the eye, that enables him to endure the rays of a bright sun, without a shade, with impunity.

Is not this an evidence of the goodness of God toward a race whom he has doomed to slavery, so that if they should fall into the hands of cruel masters, who would neglect to provide them with what we consider indispensable, a covering for the head, the light of the sun should not dazzle their eyes, or the intensity of its rays blister their skin. Knowing this fact in regard to the formation of the eye, we shall no longer feel surprised to see the slaves in the sunny south, as I have often seen them, throw off their hats as an irksome incumbrance, and voluntarily expose their naked heads to the burning sun without suffering any inconvenience.

The women often wear a turban, more for ornament than use, which they prefer to a hat that would shade the eye. And I have often seen them traveling in the bright sun on the road to church, with a gay bonnet carried in the hand.

Many other instances of the peculiar organization and functions of the Canaanite race, adapting it to the condition of slavery, and guarding it against the evils of the system, or the inattentions of a cruel or careless master, might be adduced; but enough has been shown to prove that their great Master has kindly provided for those whom he has decreed shall be "servants of servants," and "hewers of wood and drawers of water"; so that under all contingencies, as a race of people, they are far more comfortable and happy, and enjoy a condition far more

enviable, than that of nine-tenths of the laboring peasantry of Europe. If, in freedom, the descendants of Canaan could do better; live happier; become more religious; and rise higher in the scale of civilization, than under subjection to the whites; would that decree, dooming them to become the "servants of servants," ever have been found in the revelations of the Bible?

And even those who unfortunately are unable to see the hand of God in all things, cannot help observing that the happiness or misery of this people has not been left to the chance of having a good or bad master, but that in his anatomical and physiological structure, his mind and body show a most wonderful *fitness of things*, to enable him to fulfill the destiny that his very name indicates was anciently decreed he should fill: a self-submitting bender of the knee to that race that ever have been, and ever will be, masters over him.

If it had been the will of God, or consistent with great nature's law, that this race should have lived peaceably with the other races of men, when put on an equal footing with them, and had not repaid their kindness with contempt and ingratitude, but had imitated their habits of general sobriety and industry, they would long since have been adopted into the family of nations, and have arisen above the condition assigned them by an unerring law of a power far above that of man.

Let those who implicitly believe in the plain letter and meaning of the revealed word of that being whom they worship, inquire whether both English and American abolitionists are not creating hosts of unbelievers, by falsifying that word by their limited ideas of God's providence, in his wise provisions for, and care over, the descendants of Ham. Let them inquire how it happens, that guards of armed soldiery cannot prevent, in Europe, violence and bloodshed among their "white slaves," while here among the race of Canaan, no force is required to make him quietly and faithfully obey and serve his master, unless it is the will of that Being, that he should ful-

fill the decree of servitude, by which he is made more useful, more happy, more contented, and more in accordance with the benevolence of God. Let him learn, that it is contrary to the first principles of his nature, for Canaan to league with his masters' enemies.

If you doubt it look at the history of both wars with England; observe the faithful conduct and the firm adherance of the slaves of Virginia, during the revolutionary war, to their masters, when neither the persuasion or force of British armies could sever their allegiance, or induce them to become free.

A British writer, in speaking upon this subject, says, "when the slave owners were in the rebel army, and their families remained in a district of country under our authority, the slaves continued to serve their masters' families as if their masters had been at home and the country at peace. Slaves were often pressed into the service of the British, and those that would not promise to renounce slavery for liberty, were made to work on the fortifications. They obeyed through necessity, until an opportunity offered for them to return to their masters; and but few of them left the country with their benevolent British liberators—and even some who did, afterward found their way back from Nova Scotia, and joyfully returned to the comforts of slavery."

During the revolutionary and late wars, whole districts of country abounding with slaves, were repeatedly left with scarcely an able bodied white man among them, with nothing but an overruling power to guard the lives of women and children; with nothing but the nature of the Canaanite race to hold them in bondage; and yet so far from proving treacherous, or deserting their masters, they continued their labors upon the plantation, and no faithful watchdog was ever more true in giving the alarm of the approach of an enemy, or, if needed, to assist their masters families to escape to a place of safety. And their sagacity in times of danger, was sometimes shown in a most remarkable degree. I happen to know an anec-

dote illustrative of this point, which was told me by one of the descendants of the family while visiting the premises a few years since, which took place during the war of the revolution.

While the British fleet was lying in the Delaware below Philadelphia, a number of officers and men came on shore one morning at Chester, for a little recreation on land. and a supply of fresh meat and vegetables. They visited the house of General Robinson. who was then absent with the army, and openly offered freedom to the slaves. During the repast which Mrs. Robinson, with a great deal of apparent friendliness had ordered to be provided for the British officers, a slave entered and whispered to his mistress to detain the company as long as possible at the table, while he would take care of the soldiers outside. for Col. Lee's troop were just in sight on the hill. One of the officers suspecting treachery, drew his sword and threatened the negro's life unless he instantly repeated aloud every word he had said to his mistress. Faithful and fearless, he instantly declared that he was telling his mistress "dat dem dam red-coat steal all de chicken and de duck, and one dam red-coat nigger had got old turkeycock, and dev all swear dat dev kill dis nigger cause him no gib em any more rum." This quieted their alarm and set the whole company into a burst of laughter, which the negro continued to excite, and amid the continued roar of which, that grew so boisterous that they took no note of a bustle outside. Col. Lee burst into the room and declared every one of them prisoners of war.

This faithful slave was subsequently offered his freedom, which he refused to accept, and continued to serve a good master as a slave, long after slavery was abolished in that State.

During the invasion of Baltimore in the war of 1814,

¹ Probably Thomas Robinson, of Pennsylvania, later one of the original members of the Pennsylvania Society of the Cincinnati. Letter of Julian P. Boyd, Philadelphia, May 20, 1936. See Heitman, Francis B., Historical Register of Officers of the Continental Army . . . , 471 (Washington, D. C., 1914).

whole counties were drained of all the white men except a few quakers, who are always abolitionists I believe, so that tens of thousands of slaves, with none to control and awe, and keep them in check, and prevent them from robbing and murdering the women and children, and deserting to the British and freedom from slavery—yet in this very district, at this very time, did Mrs. Madison take refuge and seek protection while impressed with the fear that the British were anxious to possess themselves of her person.

It was in this district, too, at this time, while masters and overseers were all away, that the negroes on one plantation became a little unruly and neglectful of their daily labor, lazy, indolent, and insolent to their mistress. who undertook to quell a guarrel among themselves, that a man in the neighborhood, who was too much of a cripple to go to Baltimore to serve his country as a soldier, was nevertheless able to quell this difficulty; for, being sent for, he went over unarmed and flogged more than a dozen of the leaders, all able bodied men, and that too within ten miles of several British ships of war lying in the Potomac. The world does not afford the history of any other race who would have submitted to chastisement under such circumstances; nor can it be accounted for. except by those who believe that God foreordained and decreed the race of Canaan to be submissive servants of servants.

It cannot be accounted for, under the supposition that the slaves were ignorant of the promises of freedom which the British held out to them. They were not ignorant of that fact, but being themselves better Christians than their white brethren, they were not disposed to attempt to abrogate the decrees of an overruling Providence. The truth is, that the slaves of the South do not desire to be freed from their servitude. In vain did the British, in the revolutionary war, issue proclamation after proclamation, calling on them to rise in rebellion and go free under the protection of British arms—and in

vain did the tories and abolitionists of that day urge it upon them—and in vain, in the last war, did they pursue the same course—and in vain, at this day, is British gold poured out for the same object, aided as she is in her insiduous policy, by the thousands of fanatical allies in this country, who rush blindly to assist her in the only way on earth that she can conquer this Union: and that is by dissolving it through the agency of her tools, the abolitionists. Already have they succeeded in dissolving the union of one of the strongest churches in the country, and seem determined never to rest until they have dissolved the political Union.

But all the efforts of British and American abolitionists will never abolish slavery, unless you compel them to be free against their will. And until they themselves will to be free, I feel as though I was committing a sin to urge it upon them.

Nor am I defending slavery, as that word is often understood in the northern States. Many seem to suppose that slavery means cruelty, tyranny, oppression and every thing that tends to make those in bondage suffer and hopelessly repine. Now if slavery means anything of that nature, then slavery does not exist in any of the States over which I have traveled. The word slavery suggests a wrong idea to those unacquainted with the patriarchal form of government exercised over them in the United States. It is precisely the kind of slavery to which every abolitionist in the country dooms his wife and children; and I should feel just as guilty of meddling with that which I had no right to meddle with, while attempting to free them from his control, as I should to free the southern slave from the control of a kind master. Yea, more so, for in doing the latter I should feel as though I were taking a being as helpless as a child, from a state of comparative happiness and reducing him to a state of absolute misery. The few negroes that are needed among the whites in free States, to fill the menial offices of barbers, shoe-blacks, waiters, cooks and scullions, may live comfortably enough—because they are still fulfilling their destiny of being servants of servants. But let them undertake to escape from their destiny, and make the attempt to govern themselves, and you will find them, with scarcely an exception, the most unhappy, discontented wretches in existence—disturbing the peace of society—filling the prisons—taxing the country for their support—and wherever a community of them are found, becoming one of the greatest nuisances ever inflicted upon a neighborhood.

As witnesses upon this point, I will summon the island of St. Domingo—the city of Cincinnati, with her negro mobs and abolition riots—and the county of Brown, Ohio, in which some very benevolent individuals once made a colony of liberated slaves, and entailed upon the citizens a band of lazy, worthless, starving, thieving vagabonds.

If obedience to the laws of the Bible will confer happiness upon man, and disobedience misery, then can we account for the misery of those of the race of Canaan who refuse to fulfill and obey that Scripture that says he *shall* be a servant of servants to his brother Japheth.

A greater punishment could not be devised or inflicted upon the southern slave at this day, than to give him that liberty which God in his wisdom and mercy deprived him of.

Out of the condition of slavery, there is not a people on earth so unhappy, discontented and worthless, as these Canaanites. Free them from control, and how soon does poverty and wretchedness overtake them. While in a state of slavery, even in the State of Mississippi, which is pointed to as the very hotbed of negro oppression, I boldly and truly assert, that you may travel Europe over—yea, you may visit the boasted freemen of America—aye, you may search the world over, before you find a laboring peasantry who are more happy, more contented, as a class of people, or who are better clothed and fed and better provided for in sickness, infirmity and old

age, or who enjoy more of the essential comforts of life, than these *so called*, miserable, oppressed, abused, starved slaves.

Upon this point, before I close, I will also summon a few witnesses. But to continue: all experience proves, that as soon as the negro ceases to act in the capacity of a servant, he ceases to be happy and contented, and falls into a state of vice and wretchedness. All experience proves that he does not seek to escape from that capacity, except in a few isolated cases, where he is influenced by some real or supposed wrong inflicted upon him, or by the persuasion of some meddling abolitionist, whose descriptions of the superior advantages of freedom overcome his weak reason.

In proof of this I will cite the fact, that in the counties of Maryland adjoining the Pennsylvania line, there are 19,000 slaves, who, notwithstanding their proximity to a free State, and constant contact with abolitionists, continue to be submissive to those who were decreed to hold them in bondage. One of these counties, that of Cecil, contained, in 1840, more free negroes than slaves, and probably more anti-slavery white men than slave owners; and yet the slaves here adhere to the service of their masters, with nearly the same fidelity that they do in interior counties of South Carolina.

In the river counties of Kentucky, bordered by Ohio and Indiana, in which are numerous persons ever ready to help the slaves to escape from their masters, there were, in 1800, 8,260 slaves—in 1810, 15,631—in 1840, 29,872. This proves that, instead of escaping and diminishing in numbers, they increased more than three fold in forty years.

Proximity to the free States, facility of egress, together with offered aid in escaping, seem to have had but little effect in inducing any great number of slaves to leave kind masters and comfortable homes, to whom they are as strongly attached as our children are to us and ours.

Well, if they are not inclined to escape, let us see if they are inclined to rebel and take authority into their own hands, when they have the power.

In 1790, Beaufort and Colleton district in South Carolina, contained 7,965 white inhabitants, and 30,798 slaves. In 1840 the same districts contained 11,524 whites and 48,928 slaves. Liberty and Chatham counties, in Georgia, in 1790, contained 3,759 white persons, and 12,226 slaves—in 1840, there were 8,446 whites, and 16,892 slaves. Powhatten, James City, King William, Amelia and Caroline counties in Virginia, contained, in 1790, 20,383 whites and 33,484 slaves—in 1840, 16,706 whites, and 29,193 slaves.

Ten years of the above time was a period of war with a nation that used every art in its power to excite insurrection among the slaves of the Southern States, yet in no part of any of these districts, where the slaves so much outnumber the whites, did any serious outbreak against the authority of their masters ever occur, and notwithstanding that, during periods of the war, it was not uncommon for almost every able bodied man to rush to the scene of danger, leaving their homes without any other protection than the love that binds the slave to his master, and teaches him to protect every thing that master holds dear.

In 1810 the parishes (which are equivalent to counties) of Point Coupee and St. Charles, in Louisiana, contained 2,068 whites, and 5,508 slaves—in 1840, 2,961 whites, and 9,152 slaves.

New Orleans and its precincts, in 1810, contained more than three times as many slaves as whites, and during the war, all Louisiana, and all the river counties of Mississippi, contained far more slaves than whites, and were hemmed in by hostile Indians on all sides, while the British ships were on the coast sending emissaries among the slaves to urge them to rise upon the whites, or escape and seek protection and a free passage and home, under their flag; but, notwithstanding that this was in that

country where we are told they are treated with such horrid brutality, it seems that they did not avail themselves of the offered boon.

When Gen. Jackson appealed to the patriotic spirits of that region to aid him in the defense of New Orleans, there were more than 5,000 slaves in and about Natchez, and yet not an hundred able bodied men remained behind to guard their own homes; and the reason was that they knew they had no foes to guard against. But it was a strong manifestation of the instinct that has ever bound the sons of Canaan to prefer a life of slavery, comfort and plenty, and freedom from care, to the precarious existence that attaches to him when free.

Many of the present masters now in that region, were, during this period, rocked in their cradles and nursed by those who had the power in their own hands to have closed their existence, and in one day to have blotted out that terrible sin, which is said to be accursed of God: though it seems he was not disposed to order the slave, as some of his pretended friends would do, to blot it out and wash himself free in the blood of his absent master's wife and children.

Historical facts like these go far to prove, that the doctrine so often preached is not, and cannot be, sustained, that "slavery is sin," that "it is incompatible with republicanism" and "inimical to religion," and that "God looks with displeasure upon all those who," notwithstanding it may be in conformity with Revelation and in fulfillment of prophecy, "hold the Canaanite in slavery."

I have only to say that if God is *displeased*, he has given no evidence of it by continuing the guilty in the enjoyment of a high state of prosperity, notwithstanding their wickedness.

I have heard men contend that the authority given in the Bible for Japheth to hold Ham in subjection, has expired by limitation; but how or when, they could not tell, but believed it was so, because it was inconsistent with their limited ideas of God's goodness and justice to put the descendants of Ham under the despotic power of all kinds of masters-good, bad and indifferentlearned and unlearned—Christians and infidels—humane and cruel-generous and avaricious-to be dealt with according to the whim, caprice, folly, wisdom or madness, of each. Thus has erring human reason, full of vanity, sat in judgment on the decrees of God's wisdom. which is full of justice, benevolence and mercy, and were it possible for the decree to expire, Canaan would be the loser and not the gainer. For the same power that decreed him to a life of servitude, has also planted in his bosom, a principle of protection against wanton abuse and tyrannical oppression, so that though he fall into the hands of cruel or avaricious masters, who would exact more labor from him than is just that he should render. no power can force him for any continued length of time Far different from the poor starved to render it. wretches of England's manufacturing towns, he needs no act of Parliament to protect him from over work, for that he surely will do himself.

I doubt whether one single instance can be found among the slaves of the South, where one has injured himself at long and excessive labor. Instead of a cruel and avaricious master being able to extort more than a very reasonable amount of labor from him, his efforts will certainly produce the contrary effect. This is a well known fact, so much so indeed, that an overseer of this character cannot get employment among masters who know that over driving a negro, as well as a mule, is the poorest way to get work out of either of them. facts are well understood by all observant masters and overseers, that neither mule nor negro can be made to do more than a certain amount of work; and that amount so small in comparison to the amount done by white laborers at the North, that it is a universal observation at the South. Northern men are always the hardest masters, in the vain attempt they make to force the negro to do even half as much as a hireling in New England is compelled to do, or lose his place and wages.

Owing to this innate protecting principle, the tyrant is made to gnaw a file—and the cruel master heaps coals of fire upon his own head; and the avaricious one loses the gold that he vainly attempts to compel his slave to earn by excessive toil.

It is true that some men abuse and harshly treat their slaves. So do some men abuse their wives and children and apprentices and horses and cattle. But I am sorry to say that I am forced to believe the latter class more numerous than the former.

Experience has long since taught masters, that every attempt to force a slave beyond the limit that he fixes himself as a sufficient amount of labor to render his master, instead of extorting more work, only tends to make him unprofitable, unmanageable, a vexation and a curse. If you protract his regular hours of labor, his movements become proportionably slower; and this is not the effect of long habit acquired in slavery, as is proved by the fact that on his first introduction from Africa, he possesses the same principle. Every stranger is always struck, on visiting a slave country, with the characteristic slow movements of this people under all circumstances. Many a hungry traveler, from a non-slaveholding country, has cursed this slow movement while impatiently waiting two tedious hours for a negro cook to prepare a meal, which at last would be found to consist of nothing requiring such a length of time; as the whole interminable, never-changing bill of fare, would consist of coffee, cornbread and bacon.

Upon a plantation where they are universally well treated, they can, by a promise of rewards, be induced to quicken their speed in a busy time; but under a system of bad treatment and attempted force, they will at such a time slacken their speed and perform their work in a more careless and slovenly manner—fixing generally upon the most busy time, or pressing emergency, to do so. Attempt to force them with the lash when in this mood, and you will fail, for it has no terrors for them—

they actually seem to possess a kind of nervous insensibility that shields them from suffering.

This silent though effectual law of his nature, is a far better protection for him than any printed code. Until his condition is assimilated to a comparative state of ease and comfort, the master is a greater sufferer than the slave, for they will break, waste, destroy, idle away time, feign sickness, run away, and do all manner of things to vex and torment him. If he fail to give them enough of wholesome food, he will lose four fold the value, by the petty larceny that they will practice upon him.

Finally, in self defense, the avaricious master is compelled to make the condition of his slaves as comfortable, or nearly so, as others in his own neighborhood, or he must make up his mind to look ruin in the face, or run mad with vexation.

The fact is notorious, that slaves are better treated now than formerly, and that the improvement in their condition is progressing; partly from their masters becoming more temperate and better men, but mainly from the greatest of all moving causes in human actions—self interest. For masters have discovered in the best of all schools—experience—that their true interest is inseparably bound up with the humane treatment, comfort and happiness of their slaves. And many masters have discovered, too, that their slaves are more temperate. more industrious, more kind to one another, more cheerful, more faithful and more obedient, under the ameliorating influences of religion, than under all the driving and whipping of all the tyrannical task-masters that have existed since the day when the children of Israel were driven to the task of making Egyptian brick without straw.

And I do most fearlessly assert and defy contradiction, that in no part of this Union, even in Puritan New England, is the Sabbath better kept by master and slave, by employer and hireling, or by all classes, high and low, rich and poor, than in the State of Mississippi, where I

have often been told that that thing, so accursed of God, existed in all its most disgusting deformity, wretchedness and sinful horror. From the small plantations, the slaves go more regularly, and better dressed and behaved, to church, often a distance of five or six miles, than any other class of laborers that I have ever been acquainted with. Upon many of the large plantations, divine service is performed more regularly and to larger and more orderly audiences, than in some county towns.

Upon one plantation that I visited in Mississippi, I found a most beautiful little Gothic church, and a clergyman furnished with a house, provisions and servants, and a salary of \$1,500 a year, to preach to master and slaves. Upon another, situated upon the bank of the lovely lake Concordia, where the slaves outnumber the whites twenty to one, upon which I spent some pleasant days, I took upon myself to inquire particularly of the overseer, not himself a religious man, and at first opposed to religious instruction for slaves, what had been the effect of the earnest and fatherly admonitions and worship of the owner with his slaves every Sabbath day, and was assured that it had a most beneficial effect.

If any man can witness some of these happy meetings of slaveholders and slaves that I have, and not feel his heart more softened toward the influences of religion than he would in listening to the harangue of some mistaken fanatic, who would sever the bonds so closely knit between such a patriarch and his children, even if that bond should be severed in blood, I have only to say that his heart is not affected by the same influences that mine is.

Upon another plantation I visited, the master is a most decided infidel; yet so convinced is he of the advantage of giving religious instruction to slaves, that he has taken upon himself to teach them what he is so unfortunate that he cannot believe himself. Of course, from them he hides his own unbelief.

And the manner that some of this infidel master's slaves, walk in the path of Christian duty, might well be

followed by those I know most loud in denunciation of all men who dare to hold their fellow-men in subjection.

And these few cases mentioned, are by no means isolated ones. I believe that it is susceptible of proof, that there are more Christian communicants, counting black and white, in the slave-holding States, than in any other portion of Protestant Christendom, containing the same number of souls. But I am sorry to say, that there are such numbers of professing Christians in the free States who deny that man can own a slave and still be a Christian.

And I am still more sorry to say, that the action of English arrogance and ignorance, which, under the name of abolition of slavery, seeks to throw a fire-brand into the explosive magazine of southern excitability, for the hidden purpose of blowing up the Union, aided as it is in this country by political demagoguism, ignorant fanatacism, and honest belief that slavery is the accursed thing of God, has done more to retard the progress of Christianity, civilization, comfort and happiness, among the slaves, than all other causes put together.

Do we not forget the command, "judge not lest ye be judged," when we sit in judgment upon the slaveholder and denounce him as destitute of all the attributes of the Christian religion, and refuse to associate and commune with him as a brother, because he happened to be born in a southern clime to the inheritance of slavery.

And here let me inquire, what is slavery—as you understand it? Is it to be better fed, better clothed, better housed, better lodged, better provided and cared for in infancy, sickness and old age, better loved and respected by master, mistress, children and fellow laborers, better instructed in the principles of morality and religion, and, finally, at the close of a long life of light labor, comfort and happiness, to be better and more decently buried, than are millions of the laboring population of FREEMEN in Europe, and thousands of the same class in this boasted land of liberty? For this is most truly the condition of slaves in the South.

And if you answer, still he is a slave—I answer, true. he is a slave. And what is a freeman? Stand forth, first, ye who shout "long live queen Victoria;" while I display the enviable condition of Britania's free born citizens. Come forth from your damp and crowded cellars and fireless dens of squalid wretchedness, and exhibit your starved and emaciated forms, your sickly countenances, your toil-worn, youthful, crooked spines. your swelled joints and contorted limbs, clothed in so scanty a supply of filthy rags that they are hardly sufficient to harbor the vermin, or hide the nakedness, of proud anti-slavery England's freemen! Come forth from your dark and dismal coal-mine caverns, a thousand feet below the surface of the earth, where you live upon a scanty pittance that barely supports life, while you are able to toil, but now you are past it: come forth, then, and enjoy, in your toil-worn premature old age, the comforts provided for you in freedom's work-house.

Stand up ye full fed, hard toiling laborers upon the soil ye do not, and cannot own, for I would see how even the best classes of England's free born agricultural laborers, who produce all that lords and bishops eat, do eat themselves! Seven pounds of coarse black bread and four ounces of meat per week. Ah! that is freemen's food, is it? Now take me to your lodging room—for I would see where you rest your weary limbs after partaking of such sumptuous fare.

It is here—men, women and children, like hogs huddled together. But ye are freemen, and dare not murmur at your lot, or neglect your labor, for thus you will be driven forth from the enjoyment of this freemen's fare, and be free to starve, or steal, to prolong your miserable life upon the food provided for convicts and refused to you while honest.

We hear the sound of the factory bell, that tells the English operative of that world of machinery, of that government who fain would supply mankind with all their manufactured articles, that he is now free, at nine at night, to retire to his supper and his bed. We see them come—infants, youths, adults, men and women, but never old age: that dwells not here. But why are those children carried upon parents' backs—are they sick? No! Then where is the energy of youth that should prompt them to run and skip and shout and play, when escaping from a day of confinement? They have been worked, beat, duck'd and starved, and compelled, like machines, to stand up to their toil, till at the first sound of the releasing bell, they sink to the floor, unable to put forth another effort, and would rather there die than undertake at this hour to walk to their miserable homes. Is it to be wondered that old age, hale and hearty, is not here—when we see such waxen visages, and incubus-like languor, sitting upon the youth and prostrating their vital energies.

But let us follow the haggard-looking, miserably clad. hard-working operatives of the English factory system. to their homes, their supper, and their bed-down through this filthy lane, down into that dismal cellar, see them go-sixty men women and children in a room not large enough for six, nor fit for the abode of any human being. And there is the supper sumptuously set forth; but there is no table—no chair—no plate—no knife—no fork—no spoon. And why should there be, for there is nothing but a small piece of coarse black bread and a cup of raw Bohea tea for each—and the breakfast will be the same—and the dinner, potatoes fried in lard and perhaps a few small bits of meat; and the lodging, a litter of straw, made filthy by long use-for there straw costs money—in which all huddle together, lying close to keep each other warm, and from which all must rise at early dawn, to resume the daily toil—under a more severe taskmaster than the southern slave's overseer.

But to the proof. An extract from the sworn testimony of a factory overseer, before a committee of Parliament in 1832.

"I was obliged to chastise them (the factory children) when they were almost fainting, and it hurt my feelings:

then they would spring up and work pretty well for another hour—but the last two or three hours was my hardest work, for they then got so exhausted."

Sir Robert Peel, in speaking of the factory that he owned, deposes as follows:

"I was struck, whenever I visited the factories, with the uniform appearance of bad health, and, in many cases, the stinted growth of the children."

Witnesses also prove that the mind and morals suffer equally with the body. That death, a lingering miserable death, which some of the eminent medical witnesses do not hesitate to call "murder" and "infanticide," is the effect of working children in a close room of confined atmosphere, sixteen hours a day. That such unremitting toil, and meagre diet, deforms the body, impairs the health, breaks the constitution, and swells the bills of mortality, among the freemen of slave-denouncing old England. Shall I be told that this is free labor—that the master in England has no power to compel these slaves of the factory system (or "operatives," I must call them, since slave sounds offensive to freeman's ears) to overwork themselves—that they can guit their employer whenever they please, etc.? Alas the law of necessity is upon them-endure or die!

Now, lest this language sound too strong, allow me to present language from high quarters. It is extracts from English papers, prefaced by one of our own country. Here it is:

"SUFFERING IN ENGLAND.—It is next to impossible for the people of this country to form any opinion of the suffering condition of the immense masses of the hopeless poor in England. We learn, from an English paper, that a public meeting of the inhabitants of Leeds was held a few weeks before the sailing of the last steamer, to investigate the condition of the unemployed poor—and a report, carefully drawn up from detailed accounts, was read to the meeting. The extent of destitution, as represented in this report, is indeed frightful. It appears

that there are twenty thousand individuals in Leeds who are living on  $11\frac{1}{2}$  pence a week each—about twenty cents! The report said:

"The most harrowing descriptions were given by some of the visitors of the scenes they had witnessed. "The cases of distress," says Dr. Smiles (editor of the Leeds Times), "of extreme distress that had come under his notice that morning, had harrowed up his very soul. [Hear, Hear.] There was one case which he would particularly mention. He had noted down the name, and he was sure, if any doubts existed, individuals might satisfy themselves as to the correctness of the statements. the end of Brooke street there was a small cellar dwelling, nine feet by twelve, into which they were introduced by the enumerator. The dwelling was so considerably beneath the street, that only half of the window was above it. It was a damp, disagreeable, ill-lighted, illaired, den. [Hear, Hear.] In that apartment they found three families, consisting of sixteen individuals, nine who slept in it every night. [Sensation.] There were four adults, and twelve children. Six individuals, constituting one family, slept upon a litter of straw, huddled together, not like human beings, not even like animals, for their situation was nothing to be compared to the comfort of our dogs and our horses in our stables. [Hear, hear.] Other four or five slept on a bed of shavings, and the remaining five slept on another miserable bed in the apartment. When they entered, the poor mother was weeping, her infant was on her knee in the last stage of a fatal disease, dving without any medical assistance. [Sensation.] The family were entirely destitute, no means of subsistance, no weekly earnings, no parish re-[Hear, hear.] That was one instance." We fear

<sup>&</sup>lt;sup>1</sup> Samuel Smiles, author, lecturer, editor, born December 23, 1812, at Haddington; died 1904. Wrote Life of George Stephenson, Lives of the Engineers, Self-Help, Thrift, Duty. Editor of Leeds Times, 1838-1842. Wrote A History of Ireland, Guide to America, and numerous other works. Mackay, Thomas (ed.), Autobiography of Samuel Smiles (London, 1905).

Leeds may stand for a sample of nearly every town in the manufacturing districts. Winter is rapidly advancing on a population without employment, and without property, what they had having been parted with in order to supply their most pressing wants. It was stated, too, by Dr. Smiles, that "the small grocers were failing and becoming bankrupts in large numbers. Many were not able to pay their debts. This, again, acted on middle class men in a higher condition of life; and he could state, what most of them, perhaps, knew, that a large number of the first class tradesmen have recently become bankrupts."

"Another paper, the Liverpool Mercury of the 30th ult., says:

"'The winter is not yet commenced, yet the general distress throughout the country has arrived at such a point, that nothing but a wholesale famine can carry it further. From Paisley, the accounts are frightful—so frightful that even Sir Robert Peel, although he still adheres to his non-intervention as a Minister, declares his readiness to forward a private subscription for its amelioration as an individual. In the Potteries, famine stalks abroad: thousands are starving; and those who would cruelly attempt to delude the sufferers into the belief that machinery is the cause of their distress, may read. in the general destitution there, the refutation of their foolish falsehood. In the Potteries there is no other machine worked but the potter's wheel mentioned in Scripture. In the metropolis, we have a specimen of the general destitution, in the fact, that even printers, usually the most prosperous of the classes who live by labor, are appealing to private benevolence, with the appalling fact, that twelve hundred compositors and pressmen are unemployed, and many of them, with large families, are actually in a starving state.'

"The following is an extract from a letter giving an account of the distress among the working classes, prevailing at Stockport:

"'All the other trades are equally suffering. Such is the extreme starvation point to which they are reduced. that their wives are to be seen begging from door to door, or gathering the disgusting offals that are to be met with in the streets. Meat and water are a luxury which few can boast of, and as for fire, whole houses are without a spark. Last week, upward of two hundred fresh men turned out for wages, and there is every reason to fear that, ere long, that number will be frightfully increased. The constant cry of the men is, "Are we to die of starvation, or see our children fall before our faces. from hunger, while plenty abounds in the land?" The situation of the females beggars all description—naked, shivering with cold, and faint from hunger, they are parading the streets and imploring, with tears and supplications, assistance for themselves and their famishing children.' "

From another paper I give further extracts illustrative of the subject under examination.

"Let us look, for a moment, at the condition of the 'FREE' laboring population of Great Britain. We give statistical facts:

"'In London, one-tenth of the population are paupers, and 20,000 persons rise every morning without knowing where they are to sleep at night. The paupers, criminals, and vagrants, alone, are 1,800,000."—Alison's Principles of Population.

"'In Liverpool, there are 7,800 inhabited cellars, occupied by 39,000 persons. The great proportion of these cellars are dark, damp, confined, ill-ventilated, and dirty.'—Mr. Saney's Report to the House of Commons.

"Dr. Robertson,<sup>2</sup> an eminent surgeon of Manchester,

<sup>1</sup> Sir Archibald Alison, historian, born at Kenley, Shropshire, December 29, 1792; died May 23, 1867. Educated for the law. Wrote History of Europe (1829-1842); essay on Population (1828) not published until June, 1840; Life of Marlborough (1847). See Dictionary of National Biography, 1:287-90 (1908).

<sup>2</sup> Archibald Robertson, born December 3, 1789, at Cockburnspath, near Dunbar, in Scotland; died 1864. Eminent surgeon and medi-

cal writer. Ibid., 48:402-3 (1896).

who has had a great deal of experience among the laboring classes, sums up thus the accumulated evils incident to their condition:

"'Too early employment—too long employment—too much fatigue—no time for relaxation—no time for mental improvement—no time for the care of health—exhaustion—intemperance—indifferent food—sickness—premature decay—a large mortality.'

"The same gentleman, in speaking of the laboring poor of the agricultural districts, says that, in his opinion, their state is not more favorable to the preservation of perfect life of body than that of the manufacturing poor. He remarks:

"'What I say concerning these poor people, is the result of much observation of them, and I consider it a duty to lift the vail from a subject surrounded by many respectable prejudices. \* \* \* \* \* Their extreme poverty, and their constant labor so influence them, that the majority—I am sure I speak within bounds—have never the enjoyment of health after forty years of age. This is the result of bad food—insufficient clothing—wearing toil—and the absence of all hope of any better in this world.'

"'The peasant's house is not the abode of joy or even comfort. No "children run to lisp their sire's return," or "climb his knees, the envied kiss to share." The children are felt to be a burden, ill-fed, ill-clothed, and lying on beds worse than the lower animals; they are ragged, or clothed by charity; untaught, or taught by charity; if sick, cured by charity; if not starved, fed by proud charity,' &c.

"Dr. Kay, in his description of the Factory System, says, in speaking of the condition of the artizan:

<sup>1</sup> Joseph Kay, born February 27, 1821, at Salford, Lancashire, England. A. B. Trinity College, 1845; M.A., 1849. Spent four years in European countries examining and reporting upon the social conditions of the poorer classes. Author of The Education of the Poor in England and Europe (London, 1846); The Condition and Education of Poor Children in English and in German Towns (Man-

"'Domestic economy is neglected—domestic comforts are unknown. A meal of the coarsest food is prepared with heedless haste, and devoured with equal precipitation. Home has no other relation to him than that of shelter—few pleasures are there—it chiefly presents to him a scene of physical exhaustion, from which he is glad to escape. His house is ill-furnished, uncleanly, often ill-ventilated, perhaps damp; his food, from want of forethought and domestic economy, is meagre and innutricious; he is debilitated and hypochondriacal, and falls the victim of dissipation."

COMPARISON OF SLAVE LABOR AND THE PAUPER LABOR OF EUROPE; ABOLITION OUTRAGES AND FALSEHOODS; THE RESULTS OF EMANCIPATION AND THE HAYTIAN REPUBLIC, ETC.

It is not this mutual love and good will and spirit of mutual protection, binding southern masters and slaves together, that keep English freemen in submission to a system inconceivably worse than any system of negro slavery in the United States. It is want, absolute want, and perfect inability to escape from it. That there is no love for employers, is proved by the hostility of operatives against them which requires a constant force of police and armed soldiers to ride down the mob whenever they meet to discuss their grievances—by the necessity of the locking, bolting, barring and guarding, every night brings to the property holders in all English manufacturing towns, to guard their lives and property from the vengeance of the starving millions of England's slavery-denouncing, free born, poverty-inheriting laborers.

What a miserable state of insecurity and fear, so different from the prevailing practice in slave-ridden Mississippi, where I know, from personal observation, that, instead of the southern people reposing, as I have often heard asserted by visionary abolitionists that they do,

chester, 1853); also newspaper articles on free trade and national education. Died near Dorking, Surrey, at the age of fifty-seven. Dictionary of National Biography, 30:249-50 (1896).

upon a magazine of gun powder, the explosion of which they were in constant fear and dread of, masters and their families, and overseers, those cruel negro-whipping tyrants, lay down at night with feelings of the most quiet and perfect security—their persons and property unguarded by bolt or bar, policeman or soldier, and not one in a hundred ever thinks of sleeping with gun or pistol in the room: and if he did, what would be the use where doors and windows are all open, and all the slaves upon the plantation as free and unconfined as master and overseer, and yet the latter sleep as free from fear as I do in my own house.

I visited a plantation in Mississippi, upon which there are more than one hundred slaves in charge of an overseer, who, with the exception of a young physician boarder, are the only whites on the place; and two of the nearest plantations upon which there are more negroes than upon this, are each in charge of a single overseer, and another by a widow, so that, in that neighborhood, I presume that there are more than fifty able-bodied negroes to each white man. And this overseer, who is noted for his ability to make negroes labor, and undoubtedly uses the lash all that is needed, has so little fear of being blown up in this great bug-bear magazine of powder, that he lives here almost alone among the slaves, and never carried a pistol or kept fire arms in his room in his life.

A writer from whom I have quoted largely, speaking of a temporary residence upon the banks of Lake Concordia, in Louisiana, says, what I also know from personal observation, that in this neighborhood, the slaves outnumber the whites nearly an hundred to one. There is no guard or patrol on duty; the slaves are at liberty as soon as the day's work is finished; the door of the cottage I occupy has neither lock nor bolt; my room contains many valuables; yet I never felt safer in my life, for I have known this neighborhood nearly twenty years; always containing near the same number of slaves under the charge of overseers, yet peace, plenty, quiet and comfort, have had an uninterrupted reign—for experience

has taught them, that when order and discipline are preserved among this people—when they are kindly treated and made to know and feel that they are servants—that their overseer is not a tyrant, but, for the time, a master whom they must obey—they need no compulsion to make them obey, or go cheerfully to their work without his attendance, for the common practice is to rely upon the most trustworthy slaves themselves, to limit or extend the amount of each day's labor. It is an indisputable fact, that an overseer who urged the slaves beyond their strength, or that inflicted cruel or unnecessary punishment, or failed to see them well fed, or kindly taken care of when sick, would be as sure to lose his place, as though he permitted them to idle and waste their time.

If witnesses are required to prove my assertions, I can call by name an hundred as honorable and high-minded men as ever breathed the air of heaven, who will vouch for every word that I have uttered.

Having feasted upon the diet of English factory operatives, let me introduce you now to the bed and board of negro slaves, in cotton-planting, negro-oppressing Mississippi. Contrary to my practice heretofore, I will call a few witnesses by name—I am sure that they will excuse the liberty, if it should ever come to their ears, for my witnesses are gentlemen in every sense of the word. John T. Leigh, of Yallubusha county, I invoke you first; state, if you please, as you did to me, how you feed your negroes?

"The most of my negroes have families, and live as you see in very comfortable cabins, nearly as good as my own, with good fire places, good floors and doors, comfortable beds, plenty of cooking utensils and dishes, tables and chairs. But I intend, in the course of another year, to build them a new set of cabins, of uniform size, so as to correspond in appearance with the overseer's house. Those who have not families of their own, mess together; I give each of them  $3\frac{1}{2}$  lbs. of bacon, clear of bone, per

<sup>&</sup>lt;sup>1</sup> See Robinson, 1:454-58.

week, and of the same quality that I use myself, and which I make upon the place, and generally about a peck and a half of corn meal, not being particular about the measure of that, as I raise plenty of corn and grind it in my own mill, and wish them to have all they will eat without wasting it. I also give them sweet potatoes and plenty of vegetables in the season of them. Those who choose to do so, can commute a part of the meat rations for an equivalent in molasses. I also give them a liberal supply of fresh meat from time to time during the year.

"They also, as you see, all have their hen houses, and as 'master's corn crib is always open,' they raise an abundance of eggs and fat chickens to eat or exchange for any other luxuries they wish. Besides, my negroes raise a crop of cotton every year for their own use, and several of the most provident of them always have money, often to the amount of fifty to one hundred dollars. You will observe that the children are all taken care of and fed during the day at the nursery, upon corn bread and fat, and hominy and molasses.

"All the cotton clothing and part of the woolen is spun and wove by women kept employed at that business on the plantation. I give my negroes a feast and frolic every Christmas. I was born and bred among slaves in Virginia. In buying and selling, good masters are always careful not to separate families. Two of my men have wives on President Polk's plantation which adjoins mine, and whom they are free to visit every Saturday night and remain with till Monday morning."

Now this is the testimony of a most honorable living witness, whom if you wish to cross-examine, you can do so at any time. If you will visit him, you will find that no father is better loved or more respected by his children, than he is by his slaves; and I should not be surprised if some of you should acknowledge that, in every respect, they lived more comfortable than many of us do.

I will next ask you to call on Capt. Wm. Eggleston,1

<sup>&</sup>lt;sup>1</sup> See Robinson, 1:459-62.

of Holmes county, whom you will find a fine specimen of an old Virginia gentleman, and whose hundred and fifty fine, healthy, hearty looking slaves, will be the best evidence that he feeds them in the same way of the last witness. There I saw the same paternal love and the same respect for "old massa"—the little negroes running after him, as we passed through the village of negro cabins, to shake hands and say "How de do, massa,"—"God bless massa,"—and receive a reply, notwithstanding it comes from a slaveholder, acceptable in the sight of Heaven, of "God bless you, my children."

I will introduce to you one more witness, only because the system of feeding and dealing out rations, differs from the others; it is that of Col. Joseph Dunbar,¹ of Jefferson county, now upwards of sixty years of age, a native born Mississippian, who has lived all his life in the vicinity of Natchez, the very hotbed of all that is awful, wicked, bloodthirsty and cruel, in connection with southern slavery; where slaves, if they are starved anywhere, are starved here, or fed upon cotton seed, as I have heard asserted by those who believed it to be a fact.

"Upon the 'home plantation,' Col. Dunbar has one hundred and fifty negroes, fifty of which are field hands. The reason of this is, that he keeps nearly all the aged and children that would naturally belong to another plantation, where he can look every day to their wants, and provide with his own hands for their comfort. His negro quarters look more like a neat, pleasant, New England village, than they do like what we have often been taught to believe was the residence of poor, oppressed and wretched slaves. I did not give them a mere passing view, but examined the interior, and in some of them saw what may be seen in some white people's houses—a great want of neatness and care—but, so far as the master was concerned, all were comfortable, roomy and provided with beds and bedding in abundance. In others there was a show of enviable neatness and luxury; high-post

<sup>&</sup>lt;sup>1</sup> See Robinson, 1:486-90.

bedsteads, handsomely curtained round with musketo netting, cupboards of blue Liverpool ware, coffee mills, looking-glasses, tables, chairs, trunks and chests of as good clothes as I clothe myself or family with. Every house having the univeral hen-house appendage. nursery were more than a dozen cradles, and on the neat. green, grassy village common, were sporting more than forty negro children, neatly clothed, fat and happy looking, lazy little slaves. At a certain signal upon the cookhouse bell, the young gang came up in fine order to the yard for their dinner; this consisted of meat gravy, and small pieces of meat, thickened with broken corn bread and boiled hominy, seasoned with salt and lard, to which is occasionally added molasses. The cooking for all hands is done in one great kitchen or cook-house, by an experienced cook, and must be well done, as I have no doubt that the cook would be punished severer for any careless or wilful neglect about his business, than would any other hand for neglect of work in the field; and I judge this from the fact, that I accidentally overheard the Col., while examining some bread that was not well baked, ask the cook 'if he sent such bread as that to the field, because if he did, and he should repeat the offense, he would order the overseer to give him a dozen lashes for, mind I tell you, boy, that my negroes shall have good bread and plenty of it.' On being assured by the cook that that was the only loaf not well baked, and that there was plenty without it, he appeared well satisfied. I afterward examined the other bread and tasted it, and found it better than that which I have found upon many a master's own table. The bacon, too, was excellent and well cooked, and given at the rate of 31/2 lbs. per week to each hand. Fresh meat and vegetables are also given here in plenty. The breakfast and dinner is generally put up in tin pails for each family or mess, or for single hands, as they prefer, and sent to the field, which they will sit and eat in the hot sun, in preference to going into the shade. The supper they take in their own houses, to which they

often add luxuries from the hen-houses, or such as they purchase with the sale of eggs and chickens, which they frequently do to their own masters. In the yard of the overseer's house is a large, airy building, neatly whitewashed, which is used when needed, for a hospital; and upon Christmas and other holidays and wedding festivals, as a ball-room. I witnessed here again that same kind of deep-seated love for 'old massa,' from the children and several old negroes who were full grown when he was born, and had lived to see 'young massa' grow up in prosperity to provide for them in decrepid old age. The gleam of joyous satisfaction, too, that beamed from the eyes of two or three sick women, when 'good old massa' called to see sick old Kitty, was enough to warm his Christian heart to thank God that he was placed in a situation where he could give so much happiness to his fellow creatures."

If the most cold blooded abolitionist that ever sought to sever bands like these, can witness such scenes as this and an hundred others that I have seen, and not feel and acknowledge that he has had an erroneous idea of southern slavery, then will I acknowledge that God makes men with most unaccountable dispositions. It does appear to me most unaccountable, how any man, in his sober senses, with a full knowledge of facts as they do actually exist, can wish to dissolve the bonds between master and slave, on account of, and under the plea of, doing good to the slave. If he will say that he wishes it solely on account of "ameliorating the condition of the" whites, and that he conceives it necessary to sacrifice the happiness of the slaves to effect this object, then will I acknowledge that he has some show of reason and common sense on his side. But to set them free among the whites, he will make them just as much more worthless and miserable than they now are-not only as the free negroes are now more worthless and miserable than the slaves, but in just that proportion more so that the number of free negroes would be increased. To free them

and send them off to live by themselves, will be to send them away from home, friends, civilization, comfort, Christianity and happiness.

If any would inquire whether in my advocacy of letting what are termed "southern institutions" remaining quietly as they are, until the people themselves wish to change them. I also take into account all the cases in which the slave may be abused, or whether in my comparisons between English operatives and southern slaves. I take into account all the floggings of the latter, I answer most decidedly, yes, I do; for, in all my tour, during the past winter, I did not see or hear of but two cases of flogging: one of which was for stealing, and the other for running away from as good a master as ever a servant need to have, which is proved by the appearance and general good conduct of his negroes, and that they are well fed I know from many days personal observation; and I have seen some of them with better broad cloth suits on than I often wear myself; and more spare money than their master, as he will freely acknowledge. This witness is Dr. M. W. Phillips, of Hinds county, who will readily disprove this statement if not true.

If I am asked the question, I have no hestitation in saying, as did Admiral Rowley¹ to a committee of the British Parliament, "that if I had been born to labor, absolutely to labor, I would sooner have been a black, in the island of Jamaica, than a white man in Great Britain, and, taking my chance for the same degree of talent and industry, I should have been able, at an earlier period of life, to become my own master." And I do not limit my comparison to the factory operatives, but to the state and condition of the daily laborers in England, Ireland and Europe generally, not forgetting to add a few millions upon this continent.

And if the question should be asked how a slave can make money for himself, so as to be able not only to supply his own little wants, but actually to lend, as some

<sup>&</sup>lt;sup>1</sup> Sir Charles Rowley, baronet (1770-1845).

of them do, money to their own masters, I will answerby raising poultry, making baskets and brooms, gathering moss, doing overwork Saturdays and evenings, for which they are paid, and by cultivating a crop for themselves, land for which is allotted them on almost every plantation. And, although they are often too indolent to cultivate their own crops in their own time, a good overseer will always see that they do not neglect their own interest, any more than their master's. According to my observation, there are but few overseers to be found. who, like those of the factories of England, are vile extortioners of labor, often ducking children in tubs of cold water kept for the purpose, or deducting the wages of adult laborers for a moment's idleness, or delay of five minutes behind time. On the contrary, I have ever found them to be very quiet personages, and often well bred gentlemen, who would do honor to any society; seldom being personally present with the slaves on large plantations, only visiting them occasionally while at their labor, to give directions about the kind of work to be done, and to see that they do it according to orders: and in their necessary intercourse with them, affable, gentle, firm in their demeanor, without familiarity—for that no negro can bear-governing without passion, by fixed rulesseldom punishing them, except when absolutely necessary to preserve order and discipline, or prevent crimes, and never to compel them to do more work, unless they willfully neglect their duty. All of them know what their duty is upon a plantation, and that they are generally willing to do, and nothing more; and if more than that very moderate and easy duty be required, they will not submit to it, but become turbulent and impatient of control, and all the whips in Christendom cannot drive them to perform more than they think they ought to do, or have been in the long habit of doing.

If I should be asked the question, whether in all my journeying in Mississippi, I did not meet with any of those instances of the vile manner in which blacks are fed there, as is sometimes told us by rascally runaway negroes and their aiders and abettors. I should answer, only once, and that was in this manner—spending a few days with a gentleman in Washington, near Natchez, who was himself from that island where the experiment is so often tried, how great an amount of human life can be sustained upon the smallest amount of the cheapest food, and where it is considered economy to have everything eaten that is possibly eatable; I suppose he was practicing in Mississippi upon the same principle; for I observed, one morning, a negro engaged over a large kettle of boiling cotton seed and corn, cabbage stumps and turnips, cutting up and putting into the kettle a litter of pigs that had been overlaid by the mother and killed the night before; on inquiring what he was making soup for, he sery honestly told me it was to feed them young blacks, that I had just been looking at. Whether he would have dared to aver the truth, if his master had been present, is not for me to say; or whether cotton seed soup, thickened with dead pigs, is a wholesome diet, that would be relished by young negroes, I am unable to say; as the young blacks for whom this unsavory dish was destined, did not speak our language, or I should certainly have asked them the question; but, unfortunately for me and the abolition cause generally, these blacks belonged to the Berkshire family, and only answered me with a grunt.

But I do seriously say, that I did not see or hear of one place where the negroes were not well fed; and I did not see a ragged gang of negroes in the South; and I could only hear of one plantation where the negroes were overworked or unjustly flogged, and on that plantation the master was a drunken, abusive wretch, as heartily despised by his neighbors as he was hated by his negroes, and were it not for the consequences to themselves if they should rise upon and pull him limb from limb, his brother planters would rejoice that he had met the fate that cruelty to slaves, they are free to say, justly merits.

The two things that are most despised and hated in the South, are masters that abuse and starve and ill-treat their slaves, and abolitionists, who seize upon every isolated case of the kind, and trumpet it through the land as evidence of the manner that all slaves are treated, and then call upon the people of the free states to aid the negroes to free themselves from such inhuman bondage, peaceably if they can, forcibly if they must, no matter whose or how much blood shall flow.

Is it any wonder that abolitionists should be hated, despised, dreaded, feared in the South, when they see such doctrine as I am about to read from the Emancipator, showing how they intend to abolish slavery. Speaking of politics and the prospect of the abolition party getting into power, the Emancipator, the leading "Liberty Party" journal says:

"Let them (the Whigs and Democrats) distinctly understand, that our use of the ballot box leads to a use of the cartridge-box. We are opposed to international war, and believe that a Christian nation would never need to fight offensively and defensively. But we are in favor of the execution of law, and the establishment of justice at all hazards. So that, if it were possible for slavery to exist in this Union after the opponents of the system had assumed the reins of government, we should be in favor of using the physical power of the nation to put it out of existence. It is nonsense, it is knavery, it is suicide, to talk any longer of the General Government not having power to abolish slavery in the whole country, when the slaveocracy is giving it power to annex to us all the slavery of Texas and Cuba and Brazil. It has that power, or it is not for one moment fit to live. It has that power, or else to establish justice and secure the domestic tranquility is a thing which it is utterly incapable of doing."

"Fortunately, this avowal comes at a sufficiently early day to operate as a warning to the true friends of freedom, not to confer power upon a party which stands ready to trample the constitution under its feet, and involve the country in a civil war."

Is it any wonder that a people naturally of a quick and fiery temperament, should show some little excitement at such wholesale slander upon such good men and devout Christians as thousands of the slave holders of the South most truly are, and daily show themselves to be, in all things except this one damning sin of owning slaves, as it is to be found in the following extracts, which have been published in the "Indiana Freeman," a little echo of loud English abolitionism, that is seeking through all the willing tools who wickedly wish to dissolve this Union, to effect the object by promoting discord, hatred, jealousy and heart-burnings between the members of our political family, under the hypocritical plea of releasing the poor oppressed negroes from slavery.

I am truly sorry that such a paper, which a southern editor fitly calls a filthy sheet, exists in Indiana, under the name of Freeman.1 Now that these pretented extracts from southern runaway-slave advertisements, ever existed, except in the brain of some mischief maker. I will not believe until I see the originals; for I have seen, for a number of years past, a stereotype edition of these "extracts," going the round of the abolition papers: but in all my reading of southern papers, I never have seen anything like one of these pretended advertisements, nor in my anxious inquiry after truth have I ever seen any evidence of this cutting and maining, knocking out teeth and branding; and it is just as easy for me to believe that any sane man would knock out the front teeth of a horse to mark him, as he would knock out those of a slave, worth perhaps five or six hundred dollars, and by which operation he would probably injure the value of his property twenty-five per cent. But here are the extracts:

"Slavery.—Under the slave system of the United States, the master may brand his slaves with hot iron, maim them, or maltreat them in any manner whatever,

<sup>&</sup>lt;sup>1</sup> A short-lived newspaper published at Indianapolis during the middle forties by H. W. Depuy. Sulgrove, Berry R., *History of Indianapolis and Marion County*, 243 (Philadelphia, 1884).

and in pursuing runaways may shoot them. As evidence that this is often done, we make extracts from advertisements in southern papers. Similar advertisements may be found in southern papers at any time.

"'Ranaway, a negro woman and two children; a few days before she went off, *I burnt her with a hot iron*, on the left side of her face; I tried to make the letter M.'

"'Ranaway, a negro girl, called Mary; has a small scar over her eye, a good many teeth missing, the letter A. is branded on her cheek and forehead.'

"'Was committed to jail, a negro man; says his name is Josiah; his back very much scarred by the whip, and branded on the thigh and hips, in three or four places, thus (J.M.), the rim of his right ear has been bit or cut off.'

"'Fifty dollars reward, for my fellow Edward; he has a scar on the corner of his mouth, two cuts on and under his arm, and the letter E. on his arm."

"'Fifty dollars reward, for the negro Jim Blake; has a *piece cut out of each ear*, and the middle finger of the left hand cut off to the second joint."

"These are only a few of the pretended advertisements the editor gives, which he says are so common in southern papers. After giving a string of nearly a column, he thus proceeds:"

"A favorite method of marking slaves, so that they may be recognized, is by knocking out their front teeth. But this form of cruelty is mild in comparison with others frequently resorted to."

"And then continues a series of lies as black as were ever fabricated, about the most unheard of cruelties—burning slaves alive—cutting them to pieces with knives, by inches—swinging them feet upward, and whipping them to death, &c., which are stated to be common occurrences at the South, though it is graciously acknowledged that *all* slaves are not treated precisely so bad.

"Our readers may judge from such things as these the sort of misrepresentations used by these fanatical scoundrels, to prejudice the people of the free States against the South."

Now, by way of offset to these, allow me to read the following extract from a letter of Mr. Brooks, editor of the New York Express, to show that even in slavery-hating, abolition-loving Massachusetts, slaves, yea, negro slaves, were not only held, but bought and sold, 'like beasts in the market.' But as they did not knock out their front teeth, I suppose it was no sin. The extract is headed

## "OLD BOSTON ADVERTISEMENTS.

"July 8, 1771—To be sold, a hearty, likely negro boy, about twenty years of age; has had the small pox; can do any sort of work; would make an excellent servant in the country."

"April 19, 1731—To be sold by public vendue, on Wednesday next, at the Heart and Crown, in Cornhill, Boston, sundry sorts of household goods, beds, pots and kettles, brass and iron ware, and a young negro woman, seasoned to the country."—N. E. Weekly Journal.

"July 5, 1742—To be sold, a young, likely, strong and healthy negro woman, that is an excellent cook, and can do all sorts of business."—*Boston Evening Post*.

July 5 1742—Any person that has one or more negro men to dispose of, will hear of a customer by inquiring of the printer."

"Sept. 20, 1742—To be sold (among a boat's furniture), a likely negro man, aged twenty-eight, who has followed the sail-making trade eight years."—Boston Evening Post.

"Feb. 18, 1771-To be sold at auction, a sprightly

¹ Erastus Brooks, born January 31, 1815, at Portland, Maine. Founded *The Yankee* at Wiscasset, Maine. Editor and proprietor of the *Haverhill Gazette*; editorial manager, *New York Express*, 1840. Member, New York General Assembly and State Board of Health. Interested in all movements to benefit Indians. Trustee, Cornell University. Died at Richmond, Staten Island, November 25, 1886. *National Cyclopædia of American Biography*, 6:47-48 (1896 ed.).

negro lad, eighteen years old, that can speak French. Inquire of the printers."—Mass. Gaz. and Post Boy and Advertiser.

"Dec. 17, 1744—To be sold, a negro woman, about thirty-six years of age. She has been in Boston from a child. She is a good cook, and washer, and can do all sorts of household business in a complete manner, and is a very serviceable negro."—Boston Evening Post.

Here is an advertisement of a different character:

"Dec. 17, 1774—A fine negro child, of a very good breed to be given away. Inquire of the printer."—Boston Evening Post.

"Oct. 26, 1730—To be sold by David Pippoon, fine young negro girls and boys."

"Also, a white young man, who is willing to serve twelve months for five pound and prison charges."

Enough for once. I could send you more if more were necessary to show that the present customs of the South were once the customs of New England."

Is it any wonder that the citizens of the South should feel themselves aggrieved, slandered and ill-treated, and under the excitement should make use of harsh language toward the northern States? Is it any wonder that the people of the South object to any interference by the people of the northern States, or those of other nations, with what they conceive to be their constitutional rights?

The editor of the Kentucky Commonwealth says:

"Whether slavery be a blessing to us and the slaves—and we regard it as an unmitigated curse in every aspect—is not a question proper to be submitted by our government to the consideration of foreign governments. We deny even to the governments of the Co-States of this Union, any right, power or propriety, in interfering with the question. We hold that our security and our ultimate rights depend upon maintaining the question as one wholly domestic to the States in which the institution of slavery exists."

This is precisely the ground that I think all true

friends to the Union should take upon this agitating question. If abolitionists really wish to see slavery abolished, instead of seeing the Union dissolved, they will pause in their mistaken, mad career, and see if there is not a more certain way of bringing about that object, in a patriotic, christian manner, than heaping abuse upon those who were born to the inheritance. As an evidence that some of the people of slaveholding States do not esteem the inheritance as a blessing, I will give another extract from the same paper. Speaking of Mr. Calhoun's¹ letter to our Minister in France, the editor remarks upon the institution of slavery, thus:

"As to the blessings of slavery, Mr. Calhoun is very silly to argue that question even at home; still more abroad. The universal sentiment of the North, and, we believe, a majority of the people even in the slaveholding State, regard slavery here as a plague spot and a curse. In Kentucky, while we believe all her citizens are loyal to the constitution, and would resist any interference in the question, nearly all regard the institution as every way injurious to us and would joyfully adopt any just and practicable scheme of relieving themselves of the evil. The number of slaveholders in Kentucky is about one-fourth the number of voters. This is an important fact, which the considerate should constantly keep in mind. Mr. Calhoun's principles carried out, would make the laboring freemen of this country slaves to slavery.

"God forbid we should excite the smallest prejudice against either negro labor or those who enjoy it. We would make no discrimination between them and others; for we hold ourselves conscientiously bound, under the compromises of the constitution, to regard all and protect all alike."

This is the true and honest language of the Christian

<sup>1</sup> John C. Calhoun, of South Carolina, born March 18, 1782; died March 31, 1850. Secretary of war, vice-president, senator, secretary of state, and political philosopher. Established a commodious plantation homestead in his native district which he called Fort Hill. Dictionary of American Biography, 3:411-19.

abolitionist—I know the man—I know he hates slavery, but loves his country. A large majority of the slave-holders are men of proud spirit, but true hearts and stout arms and disposition to resist foreign dictation. They are to be conciliated, not despised and their rights trampled on and made subservient to the will of men who would illegally wrest their legal possessions from them. That Kentucky would this day have been ripe for emancipation, I have no doubt, if she had been conciliated instead of cursed by the abolitionists of the North.

Here is more language of a Kentucky abolitionist. It is from the pen of Cassius M. Clay. Compare it with that of the Emancipator, and tell me which is most likely to affect the abolition of slavery. Mr. Clay says:

"Slavery is a municipal institution. It exists by no

other right and tenure than the constitution of Kentucky. "I am opposed to depriving slaveholders of their slaves by any other than constitutional and legal means. Of course, then, I have no sympathy for those who would liberate the slaves of Kentucky in other ways. I have no connection with any man are set of more who would connection with any more are set of more who would connection.

connection with any man, or set of men, who would sanction or undertake the illegal liberation of slaves; and I feel bound, by my allegiance to the State of Kentucky, to resist (by force if recovery) all such forces.

to resist (by force, if necessary) all such efforts.

"Whilst I hold that the United States constitution has no power to establish slavery in the District of Columbia, or in the Territories, or in any place of its exclusive supremacy; so I contend, that in the States, once admitted into the Union, and thereby become *sovereign* and *independent*, Congress has no power or right to interfere

¹ Cassius Marcellus Clay, born October 19, 1810, at White Hall, Madison County, Kentucky; died July 22, 1903. State legislator, 1835 and 1837 from Madison County, and 1840 from Fayette County. His hatred for slavery became a crusading passion. Began publishing the *True American*, an abolitionist paper, in 1845; was forced to remove to Cincinnati where he continued its publication. Later changing its name to *Examiner*, he transferred it to Louisville. Soldier during Mexican War. Ambassador to Russia under Lincoln. See *Dictionary of American Biography*, 4:169-70.

with or touch slavery, without the legitimate consent of the States.

"I am the avowed and uncompromising enemy of slavery, and shall never cease to use all constitutional and honorable and just means, to cause its extinction in Kentucky, and its reduction to its constitutional limits in the United States.

"Born a Kentuckian and a slaveholder, I have no prejudices nor enmities to gratify; but, impelled by a sense of self-respect, love and justice, and the *highest expedi*ency, I shall ever maintain that *liberty* is our only safety.

"Then let us, having no regard to the clamors of the ultras of the North or the South, move on unshaken in our purpose, to the glorious end. Shall sensible men be for ever deluded by the silly cry of 'abolitionists?'—is this not becoming not only ridiculous, but contemptible? Can you not see that many base demagogues have been crying out wolf, whilst they were playing the traitors to their party and the country for personal elevation? Is it not time that some sense of returning justice should revive in your bosoms, and that you should cease to denounce those who in defeat do not forget their integrity, and who, though fallen, do not despair of the Republic?"

Another Kentucky writer says, that the free blacks of Kentucky are such a set of miserable, degraded, thievish beings, that he believes the people of Kentucky never will consent to the manumission of slaves unless they are sent out of the country. He also says of the abolitionists: "They should let us alone. They don't know how to fight this battle, and I fear they don't care whom they strike in their blind thrusts. On the other hand, the advocates of perpetual slavery, are full of unnecessary fear, as all the efforts of the abolitionists are in their favor."

As I have heretofore premised, that however beneficial and advantageous the system of slavery was to the slaves themselves, it was a curse to the whites; I wish to call a few witnesses upon this point. First, however, I wish to give a few statistical facts.

It may probably be estimated that there are now on the continent and islands of America, near ten millions of the descendants of the African race, including those of mixed blood in which the negro predominates, viz:

In the United States,3,500,000
British Colonies, 900,000
Hayti, 700,000
Spanish, French, &c., West Indies,1,200,000
The free States of South America, which
were formerly Spanish Colonies,1,000,000

Making 9,800,000; of whom between 5 and 6,000,000 are now in a state of slavery.

The ultimate destiny of this mass of human beings, is a matter of deep concern to the civilized world.

Hayti is the only region where they have attempted self-government, and the evident retrograde movement of that community from civilization toward their native state of barbarism, is such as to hold out no hope to the philanthropist, who would desire to see this vast number of the colored race living in a state of independence, civilization and happiness, unconnected with the whites.

This shows an alarming and rapid increase of slaves in the United States since the formation of the Union. And at the same ratio of increase for the next fifty years. which we have witnessed for the past fifty, will give to the country a slave population of 9,000,000, which will be an increase of over 8,000,000 in a century. With these facts and figures before them, it does not surprise me that southern statesmen should be so anxious to obtain an outlet for the surplus into Texas. Even now, it is evident that slave labor is unprofitable in most of the States of the Union, because of the quantity of the products of the planting States annually produced beyond the demand for them. Hence the call for conventions of planters, to agree to prohibit by force the production of an over-supply of cotton, as by the present prices they cannot live—that is in the style of luxury to which they have long been accustomed. All are sensible of the oversupply of cotton; but who ever thinks of the over supply of negroes. Many planters in Mississippi assured me that they did not make five per cent. upon their capital, and I assure you that their land is deteriorating in value more than five per cent. per annum.

FLIGHT THROUGH CONNECTICUT, CONTINUED.
[New York American Agriculturist, 8:346-47; Nov., 1849]

[October 2, 1849]

Yankee Farming.—After leaving the neighborhood of the "Old-Pond Meadow," I went on towards Boston. Now there are a great many other farms in Connecticut and Massachusetts, that have valuable tracts upon them, just as badly cultivated, or rather neglected, as the one described at page 321 of the last number of the Agriculturist. Orchards are to be seen all along the road, that look as though they have neither been pruned nor manured since "the year one."

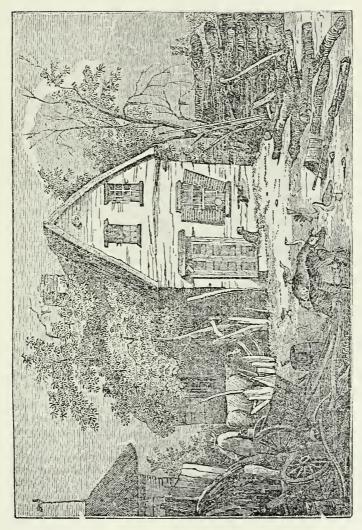
There is around some of the old farm houses of New England, a peculiar look that is to be seen no where else. The house, a large square fabric, with a great stone chimney in the centre of the gambrel roof, standing upon one side of the road and close to it, at that, with an ancient mound, the debris of long-gone wood piles, immediately in front; and right opposite, stands the barn, with a fine display, along the fence adjoining, of old carts, wagons, sleds, harrows, plows, and stone drags, while there is abundant evidence, in the shape of droppings, to show that the cows have nightly possession of the road between.

Upon the right hand of the house, is the old orchard, fenced with a post and rail stone wall, richly ornamented with elder and poke berry, together with a stock of running blackberry vines. In the corner next the house and road, and not any too far from where the family eat and sleep, is the old hog pen, with a door open to the road,

so as to give the occupants an opportunity to rusticate among the thrifty, well-manured crop of "Jymsen weed," (stramonium), that fills the lane to the right and left, affording a fine shade for the old sow and pigs. On the other side of the house, about half an acre of ground is enclosed by a very ancient picket fence, which bears the name of "the garden." Upon the south side, I suppose with a view to give the vegetables a due portion of shade. stand three enormous pear trees, that never suffered from the pruning knife, nor from an overload of fruit. Upon the east side of this garden, a row of very tall quince trees effectually prevents the morning sun from sending his rays into this sacred enclosure to interfere with those plants that grow best in the shade. The other two sides are ornamented with two thrifty rows of currant bushes, the rusty stalks of which bear evidence of long occupation of the same ground. The centre is filled up with pumpkin, squash, melon, cucumber, and gourd vines, so arranged as to promote mixture, and perhaps ensure some new and valueless variety, together with a fine show of pole beans, sunflowers, and well-dried pea brush.

I like to have forgotten to mention that the old well, with its crotch, swape, pole, and old oaken bucket, forms a part of the line of fence in front of the door and about twenty feet from it, with a very nice place for the pigs outside, and ducks inside, to rusticate, or rather "mudicate."

A very useful little building, about a house, stands a little back and near the garden gate, naked and unadorned, with its door standing wide open, and fronting the road—as much as to say, there is no *privacy* about this place. There is a little interesting spot, also, upon the back side of the house, where a little brook meanders away from the sink spout, down past the lye leach, through the goose pond, into the pig-weed patch behind the garden; but for fear of the cholera, I won't go to look at that.



TUMBLEDOWN MANSION—THE HOUSE OF FARMER SLACK [From The Plow, April, 1852, p. 121]



If you please, reader, we will go out where the boys are plowing. That land, to my certain knowledge, has been plowed for forty years, and never yet felt the share six inches below the surface, because the owner feared to turn up the "poor yaller dirt" and spoil the land. It is to be sown with rye this fall, and preparatory thereto, that fine crop of mullens is now being turned in. It cannot be manured, because there is only enough manure made upon the place to about half manure the few acres of corn, that must be planted each year.

Do you ask why the owner does not purchase guano, to give this poor old field a start, and enable him to raise a crop of straw and grass, so that he would be able afterwards to furnish its own manure? It is easily answered. He never heard of the article; and besides, if he had and should use it, that would subject him to the ridicule of the whole neighborhood. So he will sow three pecks of rye and gather nine, or, perchance, twelve pecks to the acre.

Next year, after the rye is harvested, the hogs, geese, and sheep will be turned in to gather up every scattered grain and nip off every shoot and green weed, and the spring after, it will be plowed once, just as deep as at present, and planted with corn, with about half a shovel full of dirt, dignified with the name of manure, to each hill. After the corn is gathered, the field will be again pastured, and the spring following, it will be sown in oats, and the crop will be such a one as any reasonable man might expect from just such a course.

The next season, the field will lie fallow, as it has this year, and will produce a similar crop of mullens, and five-finger vines.

That "pastur," just over the fence, was once cultivated in just the same manner as the above. It is resting now. See what a luxuriant crop of white birches. They are very ornamental to the landscape. It is true, the grass is not quite so plenty and sweet, but then you see the shade is perfect. That is a very nice little brook that meanders through the pasture, and always affords water, because it is fed by springs, and that "swale" would give a valuable crop of grass if it were ditched; but as it is not, it affords a most luxuriant growth of alders, and these serve as a nice shade for the trout. It would be a pity to disturb them.

Here is a stone wall. It stands in the place of a fence. Be a little careful about climbing it, as it was built upon a new principle. Having been told that rails would make good ties, or binders, in a cobble-stone wall, the builder put them in lengthwise instead of going into the wasteful practice of cutting them up and putting them across, and the consequence is that an occasional broadside caves away.

Ah! what have we in this field? 'Pon my word it is buckwheat. Let us put on our spectacles and take a good look at it. It is very small, certainly, but is as good as could be expected from such a specimen of "Yankee Farming!"

In the next number of the Agriculturist, I will give a reverse of the picture.

New York, Oct. 2d, 1849.

SOLON ROBINSON.

Mr. Robinson's Tour.-No. 12.

[October 6, 1849<sup>1</sup>]

## A FLIGHT THROUGH MASSACHUSETTS.

[New York American Agriculturist, 8:372-73; Dec., 1849]

[October 25, 1849]

Yankee Farming, Continued.—The Contrast.—I will now take the residence of Mr. E. R. Mudge,<sup>2</sup> at Swamscot

<sup>1</sup> This article, written October 6, 1849, at New York, but covering the events of May 9, 1849, is printed ante, 219 ff.

<sup>2</sup> Enoch Redington Mudge, merchant and farmer. Born in Orrington, Maine, March 22, 1812. Left home at fifteen. As the result of land speculations, failed in 1835 to the amount of twenty thousand dollars. Managed the Astor House, New York, for four years.

Beach, in Lynn, Massachusetts, as a contrast to those described in my two former articles: because it is a good specimen of what can be done on a very rough spot, and because I like to show the public what an enlightened and enterprising man, imbued with the spirit of agricultural improvement, can accomplish by spending his money in a rational way. That the reader may not think me invidious, however, in my selections, I will here state that there are a great many improvements annually effected in all the New-England states, and not a few gentlemen there have done, and are still doing, as much, perhaps, as Mr. Mudge; but in my hasty flight, I could not take time to visit them; and as I only speak of things seen, I must defer notices of others, until, with the spring birds, I may return from the south and trim my wings again for another flight through my old native state.

Mr. Mudge is better known as proprietor of the Verandah Hotel, New Orleans, which is one of the best in America, than as a Yankee farmer, spending his winters there and summers here. His farm consists of 120 acres, and is mostly of that character which the Indian described as his farm—"all long and no wide, and run deviling up among the rocks;" just such land and rocks as are to be seen in New England, and nowhere else, with the old stone walls, and ancient apple trees, with here and there a little "meadow," on arable spots.

Mr. M. paid \$4000 for the place some four or five years ago, and now, in consequence of the improvements, not alone of the soil, but because the improvements have added to the value of the neighborhood, the same land would sell for five times as much as he paid for it. One of his first acts was to build a residence, which is neat, substantial, convenient, roomy, and in every way com-

Opened St. Charles Hotel in New Orleans in 1840. Returned to New York in 1845. Built the Saratoga Victory Cotton Mills thirty miles from Cohoes, New York, in 1846. Member of Massachusetts senate, 1866-1867. Appletons' Cyclopædia of American Biography, 4:452 (1888).

<sup>1</sup> Printed ante, 247 ff. and 307 ff.

fortable, without having the appearance of a castle, or any unnecessary extravagance. And the "stone cottage" is all this, at least. It is built of rough granite, in diamond blocks, one story high, but from its size, 52 feet square, it affords ample lodging rooms up stairs. It is finished, and furnished richly, yet as plain as neatness could imagine. In front, lies a broad, smooth, grassy lawn, beautifully ornamented with a great variety of trees and shrubs, with ornamental cuts for flowers in the sod, the whole forming a lovely, shaded retreat, almost hidden amidst a cluster of native trees, which stands like an island in the grassy slope that reaches from the front door down to the road. South of the house, surrounded by a rustic fence, is an extensive flower garden. arranged in the neatest order; and in the rear, not too far distant for convenience, though well screened by shrubbery, stand the very neat and commodious stable, carriage house, and out-buildings. A little further on, towards the "farm house," the passer will notice a sweet little cot, quite an ornamental gem. This was built by Mr. M. for the home of a couple of servants, man and wife, which he brought from the south, and who are now serving him for wages, instead of for life.

Many of the trees seen around here have the appearance, both in size and vigor, of having stood in the same place since they first sprouted from the acorn, or the winged messenger of reproduction from the maple, as well as many other native American trees, that now adorn and beautify a spot, that, only five years ago, was as bare and unsightly as any other old rocky pasture in the state.

Moving Forest Trees.—This, Mr. Mudge had never seen done; but the Yankee character is sufficient for all emergencies. He first went to the woods, about five miles off, and selected his trees, some of them eight or ten inches through, and dug a trench around, leaving a good mass of roots and earth to the trunk. This was done in the fall. As soon as the earth was frozen, so as

to hold together, each tree was ready to be moved. He then took a pair of timber wheels, the tongue of which was hitched behind a wagon; and when backed up to the tree that was to be moved, the tongue was loosened and turned up into the tree top, and firmly lashed; and the trunk of the tree was bound to the axle, taking care to protect against bruising. The tongue was next hauled down and fastened, and the roots elevated, by this easy process, clear of the ground. When the place was reached where the tree was required to flourish, the wheels were backed up to the hole, which was previously dug, the fastenings cast off, and the whole tree allowed to settle in the position it was required to grow.

Protecting and Keeping Roots Moist.—I was struck with the manner that this was done effectually, while it added much to the looks of the work. After the ground is well smoothed off and made firm, a coat of coarse hay, or straw, several inches thick, is spread over the surface, and some small poles laid on so as to radiate evenly from the trunk; then other poles are bent around to form a rim, like a wheel, and all fastened down by wooden hooks. This, besides being of great advantage to the tree, rather adds variety to its appearance, instead of marring it by a view of the naked earth at its base.

Other Improvements.—The front fence is a solid wall of granite, which I much prefer to iron, where stone is abundant, and needs to be got rid of, or appropriated in some other way. Mr. M. has expended some \$16,000 in his house and grounds, but it is one of those commonsense improvements that will always command a return when required; and it is certainly a much more rational way for a gentleman to expend his money, in providing, as he has done for a lovely family, a lovely home, than it is to hoard it up, and spend a life of discomfort in an uncomfortable house, or mewed up in close quarters in some brick and mortar street.

I cannot close without adding a due meed of praise to Mr. Mudge, for another expenditure which he has made

at Swampscot, for the benefit of the large settlement of fishermen there. With the assistance of a few other gentlemen, whom he roused to action, a beautiful little church has been erected, whither he and his excellent wife go every Sabbath, with their children, to attend a Sunday school; thus giving his personal influence, as well as the influence of wealth, to improve the condition of his fellow men. May his days be long and happy.

SOLON ROBINSON.

New York, Oct. 25th, 1849.

BENEFIT OF RAILROADS TO AGRICULTURE. [New York American Agriculturist, 9:58-59; Feb. 1850] [October 27, 1849]

The New-York and Erie Railroad.—Twenty-five years ago, I left the city of New York to visit Binghamton. Eight hours upon a steamboat of those days carried me to Newburgh. Four days and nights, long, tedious toil in a post coach, over that region of mud and mountains, hills and hollows, and through vast, uncultivated forests, opened to our sleepy senses the valley of the Susquehanna, rich in its native pines, and covered with a fertile, uncultivated soil—for it had no market for the farmer's produce—no outlet for a surplus, except down the long and dangerous voyage of a lumberman's raft to the far, far away port of Baltimore.

How the throng at Binghamton, gaped, open-mouthed, around "the man from York," to hear his news "in advance of the mail," only four days old. Whoever then thought of things to come? Who, dreaming, would have dared tell his dream, that within less than a quarter of a century, a locomotive should be seen thundering through the little quiet village of Binghamton, with thirty burthened cars, carrying 300 tons of freight; and that this would come from New York, up and along the Delaware, and over the intervening mountains, down into this valley? Who then would have believed "the man from York," if he had told the quiet villagers that after twenty-five years he should visit them again; that he would then take his breakfast in New-York City, and his supper in Binghamton? That the might and power of man; that the persevering energy of the Yankee, would say to the granite hills—give way, and to the iron-bound points of rocks, a hundred feet high along the Delaware, we must pass; and that the hills should sink down, and rocks of ages, grown grey in their strength, should yield to the iron will of man, to make an iron road through these hitherto impassable mountain fortresses.

No one would have believed the wild dreamer. But all this has been done. Who can realise it? The New-Yorker reads of the New-York and Erie Railroad; little he knows of what its projectors and builders have accomplished. The city lady rejoices that now she can sip pure milk, fresh from the mountain pastures of Orange county; but how little she realises what a mountain-moving power has been exerted to make a path to bring this sweet luxury daily to her door. Let them go with me along this mountain route, and be gladdened at the sight of its beauties, and filled with surprise at its wonders, while they equally admire the works of nature and art.

Through the politeness of Mr. Loder, president of the company, I received a free pass to enable me to go over and examine the agricultural capabilities of the region through which the road has been made. How can I describe and journey through a region, and along such a road as this, and not have it appear tame and uninterest-

<sup>&</sup>lt;sup>1</sup>Benjamin Loder, born 1801 at South Salem, Westchester County, New York; died 1876. After accumulating a fortune in the drygoods business in New York City, retired at the age of forty-three, and transferred his activities to the New York and Erie Railroad Company. As its president, 1845-1853, he guided it successfully through a difficult financial situation. This feat accomplished, he again retired from business and lived quietly until his death. Letter from the Public Records Section, Archives and History Division, University of the State of New York, Albany, to Herbert A. Kellar, May 11, 1936.

ing, particularly to one who has ever been whirled along with the power of steam through the valley of the Delaware? We leave the city, foot of Duane street, at seven in the morning, on board of one of the company's excellent boats, and directly after we are called down to a breakfast, ready for all that have not taken an earlier one at home. In two hours we are landed upon the almost mile-long wharf at Piermont, twenty-five miles up the Hudson. This is the first wonder. It must have cost nearly a million of dollars. Whether judiciously expended or not, I will not discuss. Here it is, and will remain an enduring monument to point to every passenger upon the river, the easterly terminus of this great road. It is very spacious, and brings the cars close down to the boat.

The rails are of the E pattern, and very heavy; laid upon cross ties, and being six feet apart, give us very roomy cars; in fact, the best in this country. Now we begin to climb over the mountain barriers between the Hudson and Delaware; up through the rugged Ramapo Valley, winding along the Orange-county farms; noting at every station the rows of milk cans, and baskets of garden vegetables, ready for the "market train," until we come to that once old inland town. (now inland no longer,) of Goshen, fixed in my youthful memory as the home of the old "butter hills," of a bank whose capital, if not butter itself, was the product of it. At Port Jervis, we come down upon the Delaware, a moderate mill stream; seventy-seven miles from the Hudson, and thence along the river bank as much further, crossing it twice, through the wildest region that ever reverberated the startling scream of the locomotive whistle. At one point, the train is suspended, as it were, and it actually appears, when seen from below, as if upon a narrow shelf excavated out of the perpendicular face of the mountain, where the very thought of a tumble is enough to make a sensitive man's bones ache. What now shall be done to make these pine-denuded hills productive, is a question

that ought at once to be discussed? Why not cover them with grass and sheep, and send to New York the finest mountain mutton in the world, by every nightly train upon the road.

Leaving the Delaware, at a wide-spread, scattering village on its banks, once a great lumber-trading town, called Deposit, now just emerging into an agricultural place of trade and forwarding, we climb up the summit grade, nearly 60 feet to the mile, and over about 20 miles to the Susquehanna at Lanesborough; crossing in the way the Cascade Bridge, a wooden structure, 270 feet long, and 175 feet high; yet, as firm and unshaking as a rock.

Two or three miles further on, and we are upon one of the noblest structures of this wonder-working age. The valley of the Starucco, a wild, raging mountain stream, where the deep snows send down their floods, is spanned by a solid, stone bridge, 1,400 feet long, and 100 feet high, built upon seventeen arches, and in such a perfect manner, that generations shall come and go, and yet that monument of man's power to do good, shall tell to after ages the story of this great road. Still further along, upon another bridge, we almost pass over the top of the town. It would be an easy trick for old Santa Claus to take a flying leap from the cars into the chimney top of some of the Lanesboreans.

Now we are in the rich and lovely valley of the Susquehanna, and at seven o'clock, only twelve hours from New-York City, we alight at Binghamton, 227 miles from thence. It is not the little village of twenty-five years ago, far away in the interior of the state, and almost unapproachable, but a flourishing, lovely town; a suburb almost of the great emporium. What a change has the realisation of that wild dream accomplished for the valley. Agricultural products, which formerly were not worth cultivating for want of a market, now find ready sales and daily transit to an all-absorbing market. Only think of shipping frame houses to San Francisco from

this place over the Erie Railroad! Ah! and think too what is very likely to be the case a few years hence! Beef and mutton will not only be fatted upon these rich lands, but the slaughter houses of the city will be here also, and the animals killed, as they always should be, where they are fed; when the facilities are as good for sending the meat to market, that if butchered in the afternoon, and hung up in cars constructed on purpose, with wire gauze windows, it would be in market next morning in fine order, and far better than when the poor beasts are driven or transported alive. It appears to me to be one of the grossest pieces of folly, in our time, to continue to butcher animals within the city. Look at the amount of offal to be carried out again. The hides, too, are sent back over the same route to the tanner.

But I am off the track. Yet these things are all so intimately blended with the railroad that I can but speak of them. The road is now completed 260 miles, to Elmira, and in a few weeks a branch will be completed from there to Seneca Lake, and a large and good steamboat running all the year, (that lake never freezes,) to Geneva. Another branch is nearly ready between Owego and Ithaca-29 miles-and through Cayuga Lake, thus uniting, by either of these routes, with the northern railroads. Even now the amount of travel upon the road is enormous, but when the branches are open, it will be greatly increased; and when it is finally terminated upon Lake Erie, it will exceed any other work, perhaps, in the world, in the magnificent manner it is constructed, and in its continual length and incalculable business. It is worth a journey of a thousand miles in addition, to witness the surprisingly beautiful scenery of the country through which this road passes.

I visited several farms in the Susquehanna Valley, of which I shall speak hereafter. Solon Robinson.

New York, October 27th, 1849.

Mr. Robinson's Tour.—No. 12 [13].

[November 7, 1849<sup>1</sup>]

## THE TRAVELLER.—No. 1.

[New York American Agriculturist, 9:107-8; Apr., 1850]

[November ?, 1849]

UNDER this head, I propose to give a variety of little items, picked up upon my travels through the United States.

First, then, I left New York, November 8th, 1849, on the "Frankfort," a large, noble steamer, employed in the immense freighting business between New York and Philadelphia, by the railroad from South Amboy, which landed my carriage and horses at that place in two hours, against a heavy wind and tide. How different was the passage over this 30 miles of water 20 years ago. The village here has been built for the accommodation of men engaged upon the railroad. On the hill above, is the summer residence of Mr. John C. Stevens,<sup>2</sup> where he has about 70 acres of land, which he has transformed from barren sands to fruitful fields; an example that might well be followed by a good many others in New Jersey.

American Pottery.—A mile further along the shore, is the pottery of Mr. Cadmus,<sup>3</sup> where every variety of crockery known as "cane-colored ware," is manufactured

<sup>1</sup> This article, written November 7, at New York, but covering Robinson's travels of May 13, 1849, and following, is printed ante, 223 ff.

<sup>2</sup> John C. Stevens, born Hoboken, New Jersey, September 24, 1785; died June 13, 1857. Son of John Stevens, pioneer railroad builder. Founder of New York Yacht Club, 1845. Owner of the yacht "America" which won the international cup, 1851. Lee, Francis B., New Jersey as a Colony and as a State, 3:132 (New York, 1902).

<sup>5</sup> Probably Cornelius Cadmus, born in Bloomfield, New Jersey, in 1805; died at Fowlerville, Michigan. See sketch of the Cadmus family in Biographical and Genealogical History of the City of Newark and Essex County, New Jersey, 234-36 (New York and Chicago, 1898).

in a very neat style, from clay found in the immediate vicinity. I noticed among many other handsome articles, some spittoons, ornamented with vines and bunches of grapes, in raised work. These might be called parlor ornaments, provided they were not defiled with tobacco spittle. Designs of agricultural products or implements, would make far more sensible ornaments for such ware, than the miserable, unmeaning daubs often seen upon articles of every-day use in farm houses.

Potter's Clay.—About two miles along the shore from the railroad wharf, is one of the most valuable and longest-worked clay banks in the country, formerly owned by the late Gen. Morgan, and now by his son, Col. Charles Morgan, who also has a well-improved farm of rich soil, part of which was once blowing sand. The fertility of Col. Morgan's place has been brought to its present state by salt-marsh mud, and leached ashes; the latter obtained from Burlington, Vermont, in vessels that came for clay, which is also taken to points along both the Northern, and Erie Canal, and eastward as far as Maine. The price of the clay at the pits, is about ten cents a bushel, delivered on board vessels. Some 30 men, and several ox and mule teams, are constantly employed. The deposit, where the pit is now open, is 30 feet thick, with a superincumbent mass of sand of equal thickness. earth is removed in railroad cars and tipped into the water, and carried off by the surf. The pits are then dug down some 40 feet square, and the clay hoisted out in a tub by a mule, and carried off in carts and deposited in heaps, from whence it is again taken in ox carts along side of vessels at low water. Many acres have thus been dug over, and an almost inconceivable quantity of clay taken out: and the demand is still increasing.

Leached Ashes, used by Col. Morgan, as a fertiliser, cost 12½ cts. a bushel. Would not guano be cheaper? I

<sup>&</sup>lt;sup>1</sup> James Morgan, born Amboy, New Jersey, December 29, 1756; died in South Amboy, November 11, 1822. Congressman, 1811-1813. Engaged in agricultural pursuits. Major general of state militia. Biographical Directory of the American Congress, 1333.

think it would. Col. M. has embanked and ditched 150 acres of salt marsh, which he intends to plow and plant next year. Part of his land is so full of shells, from the remains of Indian ovstering, as to be unproductive. What application is best for this land? [Cart away the shells from the surface, and spread them on land where shells do not exist; and cart back earth and vegetable matter to the place from which the shells were taken away. By this means, a rich soil will be obtained in both situations.—EDS.1 It is sandy and gravelly. I have recommended clay and muck. Here there are some very large, old apple trees; and down by the creek, there is a dwelling house, which carries one's mind back to the days when the Indian hunted wild game in the hills around, and white men little dreamed of locomotives and steamboats, and cast-iron plows. It is upwards of a century old.

Plum Trees, when attacked by the black-wart blight, Col. M. cuts off, and engrafts upon the stumps apricots or peaches, which grow well. There is a very large salt marsh upon the same stream where Col. M. has reclaimed his, that is worth about \$4 an acre, which, if reclaimed at a cost of not more, probably, than \$25 an acre, would then be worth \$100.

Planting Oysters.—This is carried on in this vicinity to a greater extent than planting corn. It is all very well, but did any body ever grow rich at it? [Yes. It is a very profitable business in this vicinity.—Eds.] Oysters are brought here to fatten, from Virginia and Maryland. From South Amboy, along the old turnpike to Spotswood, ten miles, the land is very sandy, and covered with a scanty growth of wood, with few inhabitants.

Use of Lime in Jersey.—The farm of Peter C. Stryker is worthy of notice, as a good illustration of what lime has done in only two years, towards renovating a wornout tract of sandy land, by which it is made to produce luxuriant clover and very handsome wheat, where the former owner scarcely made hay and straw enough to

feed a small stock, but where now more hay than is needed has been made the last year. Of course, manure is not neglected. Mr S. has only 150 acres; yet thinks he has about twice as much as he ought to own, to cultivate profitably.

The Norman Horses.—Mr. Stryker thinks the kind introduced by Mr. Edmund Harris, of this state, are the best farm horses ever brought into the country.

I observe with pleasure, that the people at Spotswood are so far advanced in civilisation as to exclude swine from the privilege, long enjoyed by the family, of running in the streets, and consequently obliging everybody to pay a double portion of the enormous fence tax of the United States. Well, we all learn wisdom by slow degrees.

Visit to James Buckelew.2—Nov. 12th, I spent with one of the most remarkable men in New Jersey—one who is more worthy of honor than Gen. Scott, Gen. Taylor, Henry Clay, or Daniel Webster, because, as a farmer, he has done more good than they have, as warriors and politicians. James Buckelew, of Middlesex Co., his native place, well known throughout the state as one of the most enterprising men of business and wealth, is also one of the best farmers in New Jersey. Although not yet 50 years old, he has made all his wealth by his own industry, and the management of those he has employed to labor, and probably has cleared up and improved, or renovated, more worn-out land than any other man in the

<sup>1</sup> Edward Harris, Moorestown, New Jersey, introduced the Norman horse into this country and advocated its breeding for farm in the *American Farmer*, 4th series, 1:151 (November, 1845), taken purposes. A picture and description of one of these horses is given from the *Farmers' Cabinet*, 6:282-83 (April, 1842).

<sup>2</sup> James Buckelew, Jamesburg, New Jersey. Diversified his crops and specialized as an orchardist, having thirty thousand trees. For a description of his farming operations, see *American Agriculturist*, 9:333-34 (November, 1850) and 10:16, 29 (January, 1851). First president of the Jamesburg Agricultural Society, formed April 27, 1853, and of the Middlesex County Agricultural Society, formed November 11, 1856. Woodward, Carl R., *The Development of Agriculture in New Jersey*, 1640-1880 . . . , 190-91 (New Brunswick, 1927).

state. He owns, where he now lives, about 1,200 acres of land, the greater part of which, when he commenced there, seventeen years ago, was no better than thousands of acres of Jersey sands now are. But now, his immense barns and stacks of hay and grain are standing witnesses of the fertility of his improved soil.

To Improve an Old Pine Field.—After cutting off the timber, he burns it over and plows and then sows 40 bushels of lime and harrows it in, and sows rye, and perhaps clover. After the rye comes off, puts on a dressing of swamp muck in some instances 60 to 80 loads to the acre, of which he has a great quantity, and which produces a most marked effect upon all crops. He has also used the Squonkum, (green-sand,) marl, with the greatest benefit. It is applied at the rate of 100 to 500 bushels to the acre as a top-dressing upon grass or grain. It costs five cents a bushel at Freehold, and has to be hauled 10 or 12 miles, and yet is found to be a profitable application, even at the largest quantity.

Mr. Buckelew, is a very large owner of mules, keeping from 250 to 300 in use, mostly in towing upon the Delaware and Raritan Canal, though most of his farm teams are mules, and of excellent quality. A wagon for hauling off corn is coupled 20 feet apart, with two stout poles upon the axles, upon which the stalks are piled crosswise and ride thus in pretty large loads from the field to the barn.

A new threshing barn, with machine to go by water, has just been built by Mr. B., 40 by 60 feet, with 34-foot posts, and an underground room of same size, for storing roots and receiving the grain from the threshing machine. Mr. B. also owns several other farms which he carries on by hired labor; and is improving in a high degree, by lime, marl, muck, manures, deep plowing, and draining. The effects that this man has produced not only upon his own land, but by his example upon all the country around, is well worthy of notice.

All the land in this part of the state is comparatively level; that is, there are no hills, and the soil is mostly

sandy-just the kind to be benefited most by manure and lime.

Isaac Pullen, 1 nurseryman, thinks lime is injurious to peach trees, but that they are greatly benefited by manure. They always do the best upon new land.

Bonedust for Buckwheat, at the rate of two and a half bushels to the acre, Mr. P. says will beat any other manure he ever saw used, of the same cost. If the season is good for growth of straw, three bushels will make it fall down. With an application of only two and a half bushels upon an acre of land, so very poor that it would not produce four bushels of corn to the acre, he got 40 bushels of buckwheat.

Swamp-Muck Manure.—About four miles from Allentown, I spent a night with Mr. Forman Hendrickson, from whom I learned something of the value of peat or swamp muck. Upon three acres, he put 35 big loads of muck and 50 bushels of unslacked lime, and made 25 bushels of wheat to the acre. Some muck will do very well just as it is dug, and some must have lime mixed with it, or it is of little value. In one experiment, last summer, he saw no difference in his wheat crop between manure, guano, and muck; but upon the part manured with muck, the grass was much the best. His usual course is to dig and pile his muck and mix lime with it. His neighbor, Ezekiel Coombs, who is one of the most successful users of muck in the state, pursues this course: He bought a worn-out farm a few years ago upon credit, and by use of muck, has paid for it, besides erecting good buildings. The crops mentioned in the January number of the Agriculturist, of Mr. John L. Hendrickson, were

<sup>1</sup> Isaac Pullen, son of Francis and Effie (Breece) Pullen, passed his entire life in East Windsor Township, Mercer County. For a time followed the cooper's trade, ultimately abandoning it for the nursery business, in which he was one of the pioneers in New Jersey. At the time of his death was one of the most extensive nurserymen in the state. Served three times as a member of the state legislature. Married Jane Hewlett and had nine children. Lee, Francis B. (ed.), Genealogical and Personal Memorial of Mercer County, New Jersey (New York and Chicago, 1907).

<sup>3</sup> See "Swamp Muck, or Peat, as a Fertilizer," 9:17.

made upon a farm that had been rented and skinned for fifty years, but by the use of muck, he now gets one and a half to two tons of hay to the acre, and 30 bushels of wheat.

To Drain Land where quicksand is troublesome, can be done by cutting two ditches above the main ditch, not quite deep enough to be affected by the quicksand, so as to inclose a triangular-shaped piece of ground, which serves to take off a portion of the water and relieve the pressure of sand into the main ditch. So says Mr. Thomas Hancock. His practice is to plow in all manure upon wheat ground and harrow in all guano, lime, and ashes. He never uses any top-dressing upon grass except marl.

Rent of Land, at Camden N. J., is worth six dollars an acre, the renter finding his own manure to as great or greater amount, and yet cultivation is found profitable, owing to the convenience of Philadelphia markets, and the facility of reaching New York by railroad. In other parts of the United States, the fee simple forever, of far better land can be had for less money, which will produce more, without manure, and yet is not worth cultivating, for the very simple reason that the cultivator has no market for his surplus produce. Such land can only be made available by increased facilities of transportation. Strange that all farmers do not see the advantages of making good carriage roads, and the interest they have in railroads, plank roads, canals and navigable waters.

¹Thomas Hancock, son of Thomas and Martha (Deacon) Hancock, born September 9, 1801; died 1854. Succeeded to his father's farm in Burlington Township, and in 1822, with his brother Benjamin, established the Ashton Nurseries which became widely known. Showed deep interest in advancement of agriculture and horticulture, and was a founder of the Burlington County Agricultural Society and a member of the Pennsylvania Horticultural Society. Imported blooded cattle. In 1842 became a director of the Mechanics' National Bank, Burlington. Woodward, E. M., and Hageman, John F., History of Burlington and Mercer Counties, New Jersey, 167 (Philadelphia, 1883); The Plough, the Loom, and the Anvil, 4:108 (August, 1851); Cultivator, n.s. 6:98 (March, 1849).

## THE TRAVELLER.—No. 2.

[New York American Agriculturist, 9:138; May, 1850]

[November ?, 1849]

FROM Philadelphia to Wilmington, the road lies along the Delaware, over a very different land from that on the Jersey side. There it is level and sandy; here hilly, rocky, and clayey. There the farm houses are mostly of wood, with a light, cheerful look; here they are mostly of stone, with a dark, gloomy exterior, and from intercourse with the inhabitants, one is constrained to think that they partake in some degree of the nature of their habitations. Most of the land along this road is used for grazing purposes, and every road-side inn is a cattle market. Many of the cattle fed here, first saw the light upon the grand prairie of Illinois, whence they travelled to the rich pastures of Northern Ohio, and from there to the sweet grass-clad hills of the Delaware, and will at last gladden the hearts of some of the hungry souls who buy their daily allowance of beef in the city markets.

Average Crops near Wilmington—Farm of Wm. Webb.¹—Upon well-cultivated, richly-manured clay soil, corn, 70 bushels, wheat, 20, potatoes, 200 per acre. Rotation. Commence by turning under Timothy sod six inches deep in the fall, put on twenty two-horse-cart loads of manure in the spring, and plow in without turning up the sod, and plant corn first of May. Plow in ridges in fall after the corn is off, and again in spring with forty single loads of manure, and plant in drills, fourteen bushels large potatoes, cut. After the potatoes are dug, haul off the vines for manure, plow, harrow, and sow 8 to 12 quarts of Timothy to the acre. Mow three years without grazing or manuring, and then plow and plant corn again. Mr. Webb finds this course more

<sup>&</sup>lt;sup>1</sup> William Webb, of Woodland, near Wilmington, Delaware. Contributor to the Farmers' Cabinet and the agricultural reports of the Patent Office. Experimented with the manufacture of sugar from cornstalks. Annual Report of the Commissioner of Patents, 1842, pp. 67-75.

profitable than sowing wheat, as upon land so highly manured, it makes too much straw, which falls down, and the profitable yield of grain is apt to fail.

Mr. W. has enriched a poor, worn-out farm by the use of night soil, which he procures from Wilmington in large four-ox wagons, at one dollar a load, he finding team and wagon; or as they are called, "barges." These are tilted and emptied into a cistern upon a side hill, where the contents are diluted and drawn off by a gate and sluice into carts, and spread upon fresh-flowed ground. His stock, crops, and profits, I have given in detail at page 146 of the current volume.

Bought the farm, 100 acres, about a dozen years since. at \$50 an acre. It is now worth \$100 to \$120. Hires one man by the year and one for eight months, and occasionally by the day. Usual wages \$10 a month, and 50 cents a day. Keeps two horses and works by exchange with his father, equivalent to three yoke of oxen. Keeps one good cow and one hog. Crops last year, 22 acres corn, 18 this year; wheat 20 acres each year, but intends to guit sowing wheat; oats 21/2 acres last year and less this; mowing, 38 acres—hay sold in bulk. Intends to subsoil-plow the whole place. Limed once, 50 to 100 bushels unslacked, to the acre. Cost, 12 to 14 cents a bushel, and two to three miles' hauling. Prefers ashes to lime; they cost 12 cents a bushel, as gathered from houses, or 8 cents for leached. Of course, this system of farming can only be carried on in the vicinity of large towns, or where an equivalent of manure can be returned to the land for crops carried off.

Drilled Turnips.—No one can have an idea of the in-

<sup>&</sup>lt;sup>1</sup> Robinson listed the sales as follows: Hay, \$716.35; corn, \$557.13; wheat, \$254; oats, \$10; straw, \$18.50, making a total of \$1,555.98. Produce used at home was itemized as: 7 tons hay, market value, \$84; 120 bushels corn, \$66; 63 bushels wheat, \$63; 50 bushels oats, \$15; 40 bushels potatoes, \$25; 20 bushels buckwheat, \$14; apples and sundries, \$25; summer feed for stock, \$60, making a total of \$352. The average annual expense of manuring and working the farm was put at \$500. American Agriculturist (May, 1850).

creased crop by drilling, until he has seen with his own eyes. This I saw well demonstrated upon the farm of Dr. Brown, a real working farmer, near Wilmington. Many bunches of six to eight grew so thick that the centre ones were lifted quite upon the top of others, the tap root only reaching the ground.

Value of Swamp Muck on Grass.—Dr. B. used it as top-dressing for grass, and doubled the crop. Thinks it the most valuable application that can be given grass land at the same expense. Dr. B. is a Yankee farmer, though only lately engaged in the business, and understands the profit of manuring. He gets three crops of market vegetables a-year, from a portion of the land.

Hog Manure.—He thinks the manure that can be made by a pen of hogs, worth more than the pork, and that is worth 5 or 6 cents a pound.

Price of Milk.—He keeps about a dozen cows and sells milk at 5 cents a quart, which is equal to butter at 75 cents a pound.

How to Make a Heifer a Good Cow.—C. P. Holcomb,¹ says, let a two-year-old heifer have a calf, and let a steady good milker draw the milk three times a-day, and try to distend the udder and it will do so and increase her capacity to secrete milk.

Solon Robinson.

¹ Chauncey P. Holcomb, born in Hartford, Connecticut. Went to Ohio and thence to Philadelphia where he practiced law. Moved to New Castle, Delaware; became deeply interested in husbandry, and exerted all his influence to improve agriculture in the state. Member of Agricultural Club of New Castle County. Contributed to agricultural periodicals. Exhibited at Maryland State Agricultural Society fair, 1850. Breeder of Devon cattle. Biographical and Genealogical History of the State of Delaware, 1:523-24 (Chambersburg, Pa., 1899); American Agriculturist, 9:63 (February, 1850); American Farmer, 4th series, 4:13-14 (July, 1848), 7:138-39 (October, 1851); Boston Journal of Agriculture, 3:19-20 (July, 1852).

### THE TRAVELLER.—No. 3.

[New York American Agriculturist, 9:298-99; Oct., 1850]

[November ?, 1849]

LEAVING Wilmington, Deleware, in a southerly direction, we cross Christiana Creek, which is navigable for vessels of goodly size, some of which I noticed unloading lime here, and at the villages of Newport and Christiana, above, as within a few years the use of this great improver of the soil has become of vast importance to this The flats along this stream are broad, partiallyreclaimed marshes, and esteemed very valuable. The face of the country, south of the creek, exhibits no rocks and hills of any magnitude, most of the land on the whole peninsula being less than 100 feet elevation above tide water, and much of it not a fourth of that. The largest part of the soil is sandy loam, originally fertile, easily cultivated, and easily worn out, which has been done in numerous instances most effectually, until some of the old proprietors, unable to live longer upon "the skinning system," have given place to men of more enlightened minds: and now it may be said with truth that no county in the United States can show a larger proportion of good farms, nor a better and more improving system of agriculture, nor a more enlightened community than New-Castle county.

Hedges.—There is probably more land fenced with hedges, principally of New-Castle thorn, in this county, than any other in the United States. If kept well trimmed, at a great expense of labor, it certainly makes a very handsome fence, and against cattle and sheep, is somewhat of a barrier. That is to say, if your stock is in a good clover field, such as abound there in great luxuriance, they will not go through the hedge unless they are a very mischievous breed. Major John Jones, a very

<sup>&</sup>lt;sup>1</sup> John Jones of New Castle and Kent counties, Delaware. Prominent speaker at agricultural fairs and contributor to agricultural periodicals. Contributor of valuable statistics to the agricultural division of the Patent Office. Honorary member of the Cecil County

shrewd farmer, says that "hedge is a good fence with five rails and posts upon one side, and five boards and posts, or a good ditch on the other, to keep the hogs and cattle off, until it gets grown, say five or six years, as browsing spoils the young plants. After that, you may take away the fence on the field side, if you are careful never to turn any stock into the field." To this extravagant notion of Major Jones must every impartial observer come at last; for if the thorns are neglected a few years, they grow into a row of trees absolutely worthless, as a fence, and even with most careful trimming, they die and form gaps or thin spots, through which cattle push their way whenever they desire. As a fence against swine, nobody pretends it is good for anything.

Devon Cattle.—One of the handsomest herds of this valuable breed of cattle in Delaware, or perhaps south of New York, is owned by Mr. C. P. Holcomb, whose farm is near New Castle, and is well worthy a visit from any one curious to see how much science and intelligence has the advantage over mere bodily strength in the renovation of a worn-out soil. Mr. H. retired a few years ago, on account of bad health, from the Philadelphia bar, and purchased this farm, which long years of constant cropping and shallow plowing had so impoverished, that such a herd of cattle as now fatten upon these rich pastures, would then have starved to death. The principal source of fertility and improvement has been sought after in the soil, a few inches below where the former occupant had never looked. To this has been added lime, which has given the most luxuriant return of wheat, clover. Timothy, and Indian corn, until now, a stranger who views the crops, stock, barns, and general condition of the place, can hardly comprehend that a few years ago, it

(Maryland) Agricultural Society, 1849. Member of the committee for Delaware at the proposed fair of the National Agricultural Society, 1842. Biographical and Genealogical History of Delaware, 2:1207; Nashville Agriculturist, 3:209 (1842); American Agriculturist, 10:343 (November, 1851); American Farmer, 4th series, 4:370 (May, 1849).

was barely able to support a few scrub cattle and feed the laborers that were striving to glean a scanty support from the old impoverished fields.

Major Holcomb gives the average of his cows during summer, at 16 quarts of milk a-day, and that averages one pound of butter. One cow averaged 22 quarts, which made two pounds of butter a-day for some weeks; but this indicates an unusual richness of milk, as well as large quantity. The common estimate of quantity of milk required upon a general average, among cows, to make a pound of butter, is 15 quarts; but I am of opinion that 18 quarts would be nearer the truth. Major H. estimates his cows to average 5 quarts a-day through the year, which will give 114 pounds of butter per annum to the cow, although that is below the average of some herds. I believe it is much above the general average of the United States.

Major H. has some working oxen so large and handsome that they might be exhibited in some places further south, as natural curiosities; and in comparison with
the "piney-woods oxen," of North Carolina and some
other states I could name, they would pass for a newlydiscovered breed of horned elephants. He sells all his
choice male calves for breeders, at moderate prices, and
is thus disseminating the good qualities of this stock, and
greatly benefitting his agricultural brethren, at the same
time he is reaping his reward in a fair profit upon investments and liberal expenditures in improvements of stock,
crops, and soil.

Major Holcomb raised 500 bushels of potatoes, upon two acres of clayey-loam soil, well manured and deep plowed; but does not consider it as an extraordinary crop, nor more than may be made upon any suitable soil, by a judicious system of cultivation. One man in the county made 500 bushels upon one acre. He dropped them in every furrow, one foot apart, and then covered the ground about a foot deep with straw.

The manner of carrying on farming, adopted by Major

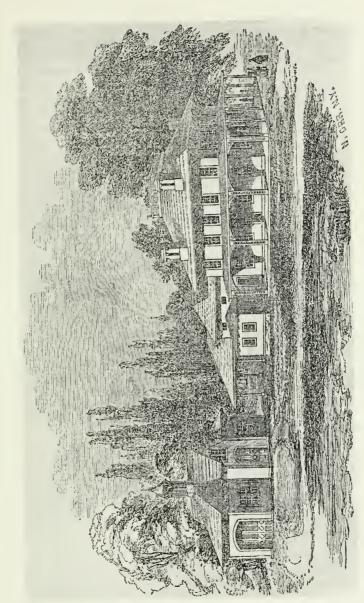
Holcomb, obviates a common objection of city gentlemen against engaging in the business, on account of the inconvenience of having farm laborers around the mansion house. He hires a farmer and wife, who reside at the farm house, taking charge of the dairy and providing for all the laborers, without any other trouble to the proprietor than the general superintendence, which he gives the whole business. If it should be objected that this will consume all the profits, I will undertake to prove to the contrary by an exhibit that will show a very handsome per centage gained upon the capital invested.

Neat Farming.—This may be seen in high perfection, upon the farm of Mr. Jackson, one of Major Holcomb's nearest neighbors. Hedges, too, trimmed and kept with such care as he learned in his native English home to be necessary, may be seen upon this farm, and equal to any live one that I have ever seen, unless I except the Cherokee-rose hedges of Mississippi.

The beauty of the general appearance of this delightful farming neighborhood is very much blurred in consequence of the town of New Castle owning considerable tracts of land which lie wedged in among those of individuals, and which are rented upon short leases, to those who can make the most out of them by the smallest outlay of improvement. This American system of renting land only for one or two years, at a time, is one that must ever prevent tenants from improving, if it does not actually ruin the soil.

As these town lands cannot be sold, an enlightened policy would dictate that they should be let upon long leases, with such stipulations that they would not only become the most beautiful, but most productive farms in the state.

<sup>&</sup>lt;sup>1</sup> Bryan Jackson, emigrant from England to Delaware. Developed his estate, said to be inferior to none in Delaware, entirely by his own efforts. Member of the agricultural club of New Castle County and active in its meetings. *American Farmer*, 4th series, 4:13-14 (July, 1848); 7:138-39 (October, 1851); 7:430 (June, 1852).



HOUSE OF FARMER SNUG [From The Plow, April, 1852, p. 120]



The Prince of Peach Growers, as Major Reybold¹ has been called, lives in this county. It is said that he and his family realised \$30,000 in one year, from their extensive orchards. Certain it is that their industry, enterprise, and improvements have added hundreds of thousands of dollars' value to the neighborhood, where they have bid the earth bring forth its fruits, whereby the tillers thereof have been enabled to build themselves luxuriant mansions, and partake of such enjoyments of life as those who cultivate the soil are justly entitled.

New-Oxfordshire Sheep. — The most extensive and most superior flock of long-wooled sheep, perhaps, in this country, is owned by Mr. Clayton B. Reybold. He has fattened some wethers to weigh 300 pounds, and has often sheared fleeces of 10 or 12 pounds of clean wool, the quality of which is not, as is generally supposed, coarse and unfit for anything but blankets and carpets. There is very little difference beween Oxford, Lincolnshire, Cotswold, and other names of all the long-wooled family. The difference is in the breeding and care of flocks. This flock is well kept and bred with care and skill.

Reclaiming Salt Marsh.—The Messrs. Reybold have made some attempts to reclaim the salt marshes along the Delaware, and have met with the same difficulty everywhere experienced; that is, sinking of the soil after

<sup>&</sup>lt;sup>1</sup> Major Philip Reybold, first of this name to settle in Delaware, a practical and scientific farmer near New Castle. Connected for a time with the steamboat lines on the Delaware River, and owner of the steamer "Major Reybold," which plied between Philadelphia and Salem, New Jersey. Owned several farms in Kent County. With his son, Clayton B. Reybold, early began reclaiming marsh lands. Raised, exhibited, and sold fine long-wooled sheep. In 1846 was succeeded by Clayton Reybold as owner of the Reybold flock. Philip Jr., Barney, and Anthony Reybold, sons of Major Philip, maintained extensive orchards and specialized in peach culture. See biographical sketch of his grandson, Clayton B. Reybold (born 1847), in Biographical and Genealogical History of Delaware, 1:261; American Agriculturist, 9:326 (October, 1850); 10:18 (January, 1851); American Farmer, 4th series, 1:337 (May, 1846); 2:14 (July, 1846); 7:137-38 (October, 1851); The Plough, the Loom, and the Anvil, 3:586-87 (March, 1851).

two or three years' cultivation, by which it is impossible to drain it without mechanical means. As this is a perfeetly natural effect, the same difficulty will occur. It is owing to the decay of the mass of fibrous roots that compose the marsh soil, and which remain entire and slowly growing so long as covered with water, but which decay and compact together as soon as the water is withdrawn. Many thousand dollars have been spent in draining marshes in the United States, which the owners were compelled to abandon after getting two or three crops. Wherever the value of such lands will warrant the use of a steam draining machine, it will be worth while to drain them. Until such time, they may be used for pasture and coarse hay, but still more profitable for the manuring of upland with the inexhaustible supply of swamp mud which they afford.

The farm of the Hon. John M. Clayton<sup>1</sup> is also in this county, on the railroad from New Castle to Frenchtown, and is most delightfully situated and neatly cultivated. May he be a happy Cincinnatus upon it.

SOLON ROBINSON.

# A PLAIN TALK—AGRICULTURAL RESOURCES OF LOWER VIRGINIA.

[Richmond Enquirer, December 21, 1849, from Norfolk Beacon]
[December 18?, 1849]

Who from the Northern or Eastern States would think of emigrating to this region, for the purpose of farming? Yet, although a Western man, and pretty well acquainted with the richness of Western soil, I am free to say that

¹ John Middleton Clayton, farmer, lawyer, statesman. Born at Dagsborough, Delaware, July 24, 1796; died at Dover, November 9, 1856. Senator from Delaware, 1828-1836; chief justice of Delaware, 1836-1839. After Harrison's campaign, in which he took an active part, devoted his energies to scientific farming. Reëlected Senator, 1845. Secretary of state in President Taylor's cabinet. Retired to his farm, said to be the most beautiful on the New Castle Railroad, in 1850. Raised fine peach trees. See sketch in Dictionary of American Biography, 4:185-86.

one might "go further and fare worse." And for a farmer to leave this part of the State, with a view to better his condition as a mere cultivator of the soil, shows to me that he is in great want of proper information of all that is necessary in a country to make it a desirable one for the emigrant. It is true that we have a surpassing rich soil in all the North Western States, but it is also true that some of the best farmers in the State of Illinois and Indiana, are fifty to an hundred miles from any market for grain, and the owners are at this moment engaged in hauling their crop that distance, over a muddy, (if not frozen,) road, while thousands of others, particularly in Missouri and Iowa, are entirely beyond the reach of any market.

It is but a few years ago that wheat in the central counties of Indiana, was an unsaleable commodity at twenty-five cents a bushel, and I venture to say that I can now buy corn for half that sum in Indiana, Illinois and Missouri. The average price of wheat at Chicago, the greatest wheat market in the world for buying direct from the farmer, for the last ten years, will not exceed sixty cents a bushel, and the average distance that it is hauled in wagons will exceed thirty miles; while the average yield per acre, counting all that is sown or lost by blight or other disaster, will not exceed ten bushels per acre.

But the Western soil, particularly the great prairie region and upon all the river bottoms, is incalculably fertile, and generally cheap; at least the immense tracts of government land can be bought at a low price, and that is what induces emigration. As a Western man it may be said that I should encourage this. My writings for years will prove that I have not, i. e. indiscriminate emigration. Why should I? I have no great interest to serve. I own no great tracts of land, and I am no aspirant for office-seeking popularity. I have enjoyed the character of a philanthropist. I would maintain it. I would persuade men to be contented with their present homes,

though not in their present condition.—No! I would urge them to improve them. If their soil is not fertile, make it so. Lime, the great source from which fertility can be drawn to all the Virginia lands, is in inexhaustible abundance in your marl beds and oyster shells, or of easy attainment from the calcareous rocks of the north. Then there is Guano, the most concentrated manure in the world which can be procured in every city, and is certain to be fully paid for out of the first crop. Upon all your sea coast you have the cheapest of all manures in fish. sea weed and swamp muck. And you have even within twenty miles of Norfolk, natural soil, still covered with the original growth of timber, as rich as the far celebrated bottoms of the Wabash. And even your light lands, such as most of those upon the Eastern Shore, can be easily made more profitably productive than the grand prairie, because you can cultivate two acres of that land with the same force that you can one of stiff land, and by a judicious system of rotation of crops, provided one of them shall be grass or clover, you can keep the land forever productive. But above all other considerations, the lands of lower Virginia, throughout almost the whole extent, possess greater facilities for getting produce to market than any other equal extent in the United States. Nearly one half of the farmers might load their own vessels, and in two days have them in New York or Baltimore.

And notwithstanding all these advantages, one half of your farms are so badly cultivated that land and owners are growing poorer every year, and talk of emigrating to the West. Thousands of acres of land are covered with forest trees, from the product of which thousands of men manage to keep soul and body, and wife and children in existence, but with very few of the comforts of civilized life in or around their dwellings, or upon their tables or person.

You need not tell me that the country is unhealthy. Cut down these immense forests; drain the swamps and

take off all standing water from your fields; improve your dwellings, and lime your lands; drink less rum, and bless God for health and happiness, and that your lot is cast in one of the most desirable sections of these yet United States.

Invite among you industrious farmers from the North.—Try to eradicate that foolish idea that prevails there that a white laborer is not respected here. Every man is respected by every one who possesses the true characteristics of a gentleman, that devotes himself to the business of his life.

Northern men have lately engaged in the business of raising early garden vegetables, in the vicinity of Norfolk, for Northern markets. Even this "small business" may be made a great one, and bring about great improvement of this extraordinarily kind and easily tillable soil, and thereby make lower Virginia, not only a most desirable agricultural country for residents, but inviting to emigrants from abroad.

To the citizens of Norfolk let me say, that if you would see your city rise from its Rip Vanwinkleism, you must arouse the sense of your surrounding agriculturists to the truth, that they possess the land and means of making this region the garden spot of the world, and then, and not till then, will your city prosper, as every city always does, in the midst of a highly cultivated country. To do this, spread knowledge abroad.

If any one is desirous of knowing who it is that is holding this plain talk to them, he may learn by "inquiring of the printer," that I am SOLON ROBINSON.

#### AGRICULTURAL TALK.1

[Richmond Enquirer, Dec. 25, 1849<sup>2</sup>]

[December 20, 1849]

It is a matter of history, that the Brisish officer, who dined with General Marion, in his swamp retreat upon the Pedee, upon roasted potatoes, served up in a wooden tray, reported to Lord Cornwallis, that such a people could never be conquered: Because, when men could be found who were born, or had lived, perhaps, in affluence, or held high station in life, and who voluntarily descended to such a degree of republican simplicity, they were invincible as soldiers, and incorruptible as men.

Now, there may be seen upon the left bank of James

¹ This speech was delivered before "a gathering of Legislators and citizens, assembled in the House of Delegates" at Richmond on Thursday evening, December 20. Prefacing the extract quoted, the Enquirer said: "Mr. Robinson is a fine-looking man; his face and figure are quite peculiar and picturesque. He is very tall and rawboned, his eyes black and sparkling, florid complexion, head covered with premature white locks, and a large and characteristic snowwhite tuft of hair from his neck falling on his breast. . . .

"Mr. R. is not a polished or elegant speaker—but, with his strong voice and blunt, off-hand manner, he presents . . . a volume of important and interesting facts, occasionally dashed with dry humor. . . . He warmly urged the appointment of an Agricultural Chemist, to traverse the State, analyze and doctor the soil, &c. The great increase of the value of lands, consequent upon the appointment of such an officer . . . he thought, would soon repay . . . manyfold the expenses. . . .

"Mr. R.'s suggestions in regard to the manner of conducting agricultural societies, and in favor of the farmers of our Legislature holding meetings during their sessions, to discuss the subject and arouse the public mind, were wise. . . Mr. R. paid a high tribute to the capabilities of Virginia, which, in view of her excellence of soil and climate, vicinity to navigation, &c., was one of the most desirable States in the Union. . . .

"Among other things urged by Mr. R. was the respectability of the occupation of farming. . . . To illustrate this, as well as to show the beauties of a republican form of government, in the operations of which our King of to-day is a supervisor of roads and high-ways to-morrow, he gave a very interesting anecdote and sketch somewhat as follows:"

<sup>&</sup>lt;sup>2</sup> Reprinted in La Porte County Whig, February 9, 1850.

river, about sixty miles below Richmond, and some two miles back from the bank, a dwelling, which, although with all its attachments and offices, shows a front of white frames 270 feet long, yet, in fact, is a very moderate sized farm-house, upon a tract of some eleven hundred acres, though only six hundred and fifty acres are in cultivation. And here, upon this spot, may be seen as great a show of Republican simplicity, as the British officer saw in Marion's camp. For here lives, in plain and simple style, a plain Virginia farmer, engaged in improving, by lime and marl and deep ploughing, the old fields; cutting down, and clearing up, and fencing, and bringing into cultivation the forest; and ditching and draining the swampy places; and growing wheat and corn for sale.

Ask the captain of the steamer to set you ashore, and bend your steps toward vonder farm-house. Perchance on the way you will meet a plainly-dressed farmer, of about sixty, riding about in a little carryall wagon, drawn by a plain-looking old white horse. He is superintending. personally, the affairs of the farm—giving a direction to a servant here, and a word of encouragement to another there, or making some inquiry after the stock or crops, of some confidential one with whom he holds a short consultation. Approach, and introduce yourself without ceremony, and he will invite you cordially to ride home and dine or sup with him, with as little ceremony as you will ever find where true hospitality and politeness prevail. The table will be graced by a beautiful lady, (a second wife.) and perchance a most lovely daughter of some twenty summers, blooming in health and such good countenance as shall make you almost break the tenth commandment. There too you shall see a couple of sweet little boys, that gladden the declining years of the old farmer.

Stroll out after dinner into the old oak park. Here is a monument that marks the tomb of some departed friend. Read: "Here lieth the bones of my faithful old horse, General, aged 25 years; who, in all his long service, never blundered but once;—would that his master could

say the same." Now who is that master? He hath not always lived in this humble, though happy home, so retired from all the bustle of city or political life. No, he was once master of another mansion, widely known as "The White House," where he dwelt as the ruler of twenty millions of people, and wore the authority of that rank that entitled him to the name and honor of the "proudest sovereign in the world," for he was President of the United States. But, by the working of the beautiful machinery of our glorious republican institutions, this mighty sovereign is again "one of the people," but still wearing a proud and honorable title, for he is now known as "Farmer Tyler of Virginia."

# ROBINSON TO RICHMOND ENQUIRER.

[Richmond Enquirer, Dec. 25, 1849<sup>1</sup>]

[December 24?, 1849]

To the Editors of the Enquirer:

As I hope my remarks on Thursday evening, in regard to holding Agricultural meetings at the Capitol, during the session, will be productive at least of a few such reunions, I venture to suggest a subject for discussion.

These meetings should be organized and conducted in parliamentary order, and proceedings reported for publication. Suppose then, that a resolution is introduced for discussion, as follows:

"Resolved, That it is expedient and for the best interests of Virginia, to prohibit the importation of hay into this State." But how? asks the captain of a Connecticut schooner, who is there present to take part in this free debate, after having sold out all his bundles of hay at such a price, that every hundred weight shall give him two bushels of Virginia corn. How will you do it? Will you pass a law against my bringing hay as well as free niggers here; or carrying away those that are not free? Yes, sir, we will pass such a law, but it shall be a more effectual one than any statute law; it shall be law of home

<sup>&</sup>lt;sup>1</sup> Reprinted in La Porte County Whig, February 9, 1850.

supply. We will insist that our Virginia farmers can better afford to raise hay upon their rich clay lands, to send to Connecticut, than she can raise it for her own use, upon her rock-bound, high-pined lands, and more expensive labor.

We will pass no non-intercourse laws, but we will make up a spirit of inquiry among our people, and accustom them to think, to read Agricultural books and papers, adapted to their use, until they improve their system of Agriculture, so as effectually to stop the importation of hay and some other "Yankee Notions."

Away goes the Captain without reply to this knockdown argument, orders his vessel to sea in a hurry, with a remark half to himself and half to his three stalwart sons, who are his sailors: "I will tell you what it is, boys, the Devil has got among these Virginians; they actually talk about raising their own hay and onions. I guess we shall next year have to go a *leetle* further South for a market. Well now these are tarnation good grass farms, that's fact; but how 'twill spile trade if they du git to raisin' their own hay. By thunder, I 'spose they'll cut off all this wood then along James river, and spile our trade in that line, darn 'em."

Although this is a "fancy sketch," I put the question to any reasonable man if the result is not just such an one as might be expected to follow the discussion of that resolution. Let somebody else who is fond of throwing firebrands among powder kegs offer the following resolution:

"Resolved, That all money laid out in the purchase of guano, to be used upon Virginia soil, is a dead loss of capital," and I think he might get up an explosion quite interesting; for I believe there are a few around Richmond that might be induced to come into the meeting and tell their experience, to prove that money never was invested by a farmer to better profit, than in the purchase of this most remarkable fertilizer of his soil.

Another subject that might be discussed, is the question whether it would be advantageous to the farmer to sub-soil, plow and under-drain his land. But I will not be

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tedious. I hope the subject will not be allowed to drop here, but that such meetings will be held; and I shall see much good resulting from them.

With respect, Yours, &c., Solon Robinson, Travelling correspondent of the American Agriculturist.

# TO A CONNECTICUT FARMER.

[New York American Agriculturist, 9:95-96; Mar., 1850]

[January 27, 1850]

Your article in the January number of the Agriculturist, has just met my eye.1 I cannot turn to the article that has been the cause of your animadversions, for I am upon a small island, on the coast of South Carolina.2 and my trunks and books are in Charleston. But I suppose that I drew a picture, in my "flight," of some spots that you would prefer to keep hidden from the world. That was not my object. You seem yourself to think, that my pictures were fictitious. But I assure you that they are true ones. It is equally true, that I might have given "a different complexion" to them; and I knew the "right source" to inquire; and was "able to compare the past with the present;" for I was born among the rocks, in the most rocky part of Connecticut. But I did not design to show the bright side of the picture, nor did I show its darkest side. There is, and has been, ever since I knew the state, a miserable system of farming carried on there, that is wholly unworthy of the present age of improvement. There is a larger proportion of readers in this state, than, perhaps, in any other; but how many of them read agricultural books or papers? Do you teach agricultural chemistry in your common schools? Have you a state geologist, chemist, or public lecturer? Do you generally subsoil your clay soil, or underdrain your thousands of acres of cold, spongy side hills? Are there not thousands of "old-pond meadows" and swamps, yet undrained? Do not Connecticut farmers continue to barely scratch the surface with the plow? And do they practise

<sup>&</sup>lt;sup>1</sup> See ante, 252 n. <sup>2</sup> See "Mr. Robinson's Tour-No. 18," post, 364 ff.

the most improved scientific methods of making and using manure? Do they not still mow over five acres of ground for a ton of hay? And are there not hundreds of just such farms as the one I drew a picture of? Then wherein have I "done you injustice?" or made an "unwarranted attack upon you?"

You little knew me, if you supposed that I would make such an attack upon any portion of my country. I intended to tell my native state that she was asleep, and in my flight over my native hills, I endeavored to stir her up. Since writing that article, I have seen a whole county aroused to attend an agricultural fair, in one of the richest sections in the state. What aroused it? Was it to make a great show of stock, improved implements, &c., or to compete for premiums for the best systems of draining and cultivating the soil? Was it to witness a great plowing match and trial of skill, and to determine which was the best kind of plow? If so, it is wonderful that there were but four plows—and one of them furnished by the proprietor of the land, "just to help out." But there was a great crowd attending the fair. What brought them there? Why, to see Gen. Tom Thumb!! It was not the spirit of agricultural improvement. If that prevails in Farmington, I am glad to hear it; it does not prevail universally. The people of the state need arousing; and could I succeed in awakening them, I should be willing to be called a few hard names, while they were rubbing their eves: but when they get them open, so as to see that I am a son of the same soil, and only anxious for their best interests. I hope they will no longer accuse me of doing them injustice, or making an unwarranted attack upon my own, my native land.

Upon the place where I am writing, there are 700 negroes, and two white men; and yet the state of culture here, might shame many a Connecticut farmer. It is a picture of order, neatness, comfort, and happiness. But of this, and Connecticut farming, more anon. Your true friend,

SOLON ROBINSON.

South Carolina, Jan. 27th, 1850.

Mr. Robinson's Tour-No. 14.

[New York American Agriculturist, 9:49-51; Feb., 1850]

[January ?, 1850]

Swamp Draining.—This has been done by Governor Hammond,<sup>2</sup> of Silver Bluff, South Carolina, to a greater extent than by any other person of my acquaintance. When I visited his place, in April last, he had about 600 acres in cotton, upon land that three years ago was almost impenetrable swamp; full of timber, living and dead, and matted together by running vines, with a soil five or six feet deep, but so soft, that, even after it was cleared of timber, a horse could not walk over it, nor until some time after it had been thoroughly drained. In fact, one of the swamps, (there are three different tracts drained,) was covered with 2 to 4 feet of water, constituting what is known as a "cypress pond." These swamps are basins, or natural depressions in the upland, which is here all composed of a light, sandy soil, interspersed with swamps, which heretofore have never been successfully cultivated, although everywhere abounding in the south, and possessing the same general characteristics as these upon Governor Hammond's land.

He first commenced with a tract containing 170 acres. Being one of the most practical of men himself, he avoided a very common course among southern gentlemen, who act altogether too much upon the principle that sometimes induces sporting men to "go it blind;" and there-

<sup>&</sup>lt;sup>1</sup> Reprinted in Southern Cultivator, Augusta, Georgia, 8:37-38 (March, 1850).

<sup>&</sup>lt;sup>2</sup> James Henry Hammond, born November 15, 1807, at Stoney Battery, Newberry District, South Carolina; died November 13, 1864. Editor of Columbia Southern Times, 1830. Moved to Silver Bluff on the Savannah River and operated a cotton plantation, 1831. Representative in Congress, 1835-1836. Governor of South Carolina, 1842-1844. In 1855 moved to Redcliffe on Beach Island in the Savannah River. Owned thousands of acres and over three hundred slaves. Scientific and highly practical farmer. A founder of the South Carolina Agricultural Society. Contributor to De Bow's Review, 1849, 1850. United States Senator, 1857-1860. See sketch in Dictionary of American Biography, 8:207-8.

fore his first operation was to make a careful survey and estimate of cost, with the quantity of land to be reclaimed, and its estimated value, and then make a diagram, showing all the lines of leading ditches, to serve as a complete guide for the overseer in prosecuting the work; for here, everything is done under the direction of the proprietor.

It was found, on examination, that to have the outlet upon his own premises, required a ditch a mile and three fourths long, and from 5 to 13 feet deep. This being done. it took off a portion of the water so that hands could commence clearing off the timber and bushes, which proved to be a heavy job, as the ground was still so wet that the bushes would not dry sufficiently to burn, and had all to be piled upon fires previously kindled with light wood. In the meantime, ditches were cut five feet deep through the centre, and all around the edges, and in every other direction where springs showed their waters; as that depth was found necessary in all cases to cut them off. while the intermediate space was checkered with smaller ditches, usually three and a half feet deep, to take off all the surface water, and insure at least three feet of dry soil. As the swamp would not sustain a horse, or mule, it had, and still has, to be cultivated entirely with hoes; but notwithstanding the cost of reclaiming and the trouble of tilling, the first crop was such as to promise remuneration. and induced Governor Hammond at once to undertake another swamp of 300 acres, of the same character as the first. The growth of timber was sweet gum, tupelo gum, red bay, poplar, short-leaved pine, and some others; the soil entirely vegetable muck, lying upon sand. The third swamp was the cypress pond before-mentioned, and exceeds any piece of land I ever saw for quantity of stumps. This also required an outlet ditch upwards of a mile in length, part of which is 20 ft. deep. How this is to be kept from caving and filling up, is more than I know. drain the three swamps, in all 600 acres, has required near forty miles of ditching, counting nothing less than

three and a half feet deep, and has cost five dollars an acre, the clearing \$25, and marling \$10. This last operation. Governor Hammond has gone into most extensively. upon nearly all of his land in cultivation, having used 400,000 bushels, at the rate of 200 bushels per acre. is boated thirteen miles up the Savannah River, from Shell Bluff, and then hauled from one to three miles out upon the land. The marl is composed of ancient sea shells, among which are now to be seen perfect oyster shells, of a mammoth size. The effects of marling the upland were very stimulating at first, but not permanent, for the very reason that so many others fail in the use of calcareous manure; and that is, neglecting to give vegetable matter for the lime to act upon. Upon the swamp land, it will be very different, for there the soil is a complete mass of roots and decayed leaves, from 2 to 12 ft. deep; and upon the part longest in cultivation, the benefit of the marl is still very great. And what was at first a quagmire, is becoming so solid that I rode over it without difficulty.

Last year, a fair crop from one acre was weighed, and gave 1,788 lbs. of seed cotton, notwithstanding much of it was blown out and wasted by a storm. Much of the ground, too, was occupied by roots and stumps.

It is found necessary to keep one hand all the time in each field, going through all the ditches, to clear out obstructions; as the banks, until they acquire a sufficient slope, will continue to slide in and stop the water from flowing free.

The manner of estimating the cost of the improvement, has been by keeping an accurate account of all the labor, and then calculating by the rule of former years, how much cotton could have been made by the same labor, and the value of it, and this being charged against the ditching and clearing, gives the amount stated as the cost per acre. Governor Hammond counts now \$15,000 outlay for ditching and clearing, and \$5,000 for marling, for which he has not yet received any returns. But so sanguine is

he of success, that he has lately purchased 900 acres more of swamp, which he intends next to commence upon. He owns some 10,000 acres of land, 3,000 of which is under cultivation. A great portion of the balance is pineywoods sand, and of very little value for tillage.

His crop of last season was 1,100 acres of corn, which averages 10 to 15 bushels per acre, and 650 acres of cotton, 570 of which was swamp, and cultivated entirely with hoes. The balance of the land is "resting;" a term peculiar to the south, and does not mean that it is covered with a luxuriant crop of clover or grass, by which the soil of northern farms is renovated, when it needs rest from long-continued tillage crops. "Resting" is the only renovating process known to most of the planters. Gov. H. thinks that a crop of weeds is highly beneficial to the land. I think if it were *shaded* with a coat of straw, it would be better.

Governor H. plants cotton in drills, 4 to 5 feet apart, and stalks 15 inches apart in the drills. This, at an average of 30 bolls to a stalk, will give 1,800 lbs. to an acre. He says that he has seen 700 bolls and forms upon one stalk; and that it made 4 lbs. of cotton. It grew upon a dung heap. This is pretty conclusive proof that it would be profitable to grow the whole crop upon a dung hill.

Corn is planted 3 by 4 ft. apart, one stalk in a square only, being allowed to stand. The average crop in the district does not exceed ten bushels per acre, and probably not over eight. Upon upland, ten bushels is considered a good crop. The average crop of cotton is about 400 lbs. per acre. A common hand tends ten acres of corn and ten acres of cotton, upon the light lands of this part of the state.

It was in consequence of having worked this kind of land until it would no longer produce remunerating crops, that induced Governor H. to try what he could make out of the swamp lands. In speaking of renovating light land with peas, he says that he has found more benefit from letting the vines decay upon the surface, than he has in

turning under green vines. He has one field that has been cultivated upwards of 100 years. This is upon the bank of the river. The "old, brick house," memento of the Revolutionary War, stands in this field, and which has been preserved with so much care, is now about to yield to old age and crumble into a shapeless mass of brick and mortar.

There is one thing about the work upon this plantation, that might be imitated to advantage upon some others; and that is, a personal superintendence of the owner, and the use of good tools. The No. 15 plow is the one most preferred. He has some very good Ayreshire cattle, which show to excellent advantage alongside of the natives of that region. He also raises some good colts; but don't find raising hogs and making pork to be profitable, principally because he cannot rear pigs, which is owing to a most unconquerable love that the negroes have for fresh pork.

His plan of clothing his negroes struck me as something new. He buys the cloth, and hires the "pineywoods people" to make it up. Not because his own people might not just as well do it, but because the poor, white women around are willing to work, and need the pay. He has upon the place, 220 negroes. I give the amount of his annual expenses for several years, by way of comparison with other places heretofore given.

Year	Year
1844,\$4,225	1847,\$4,847
1845, 3,467	1848, 3,690
1846, 4,923	

This, it will be seen, is very greatly less than a Louisiana sugar plantation; so that a much smaller crop may still leave as large a surplus.

I have no room to describe the many beautiful paintings and statuary that adorn the mansion, but I must say that the literary visitor will find here one thing to admire, which is too often missing from gentlemen's houses, both

north and south, and that is, a most valuable and extensive library; and an owner who is one of the best-read men in the country. The mansion house is located, for the benefit of a healthy site, upon a tract of almost bare sand, in the midst of pine woods; and, being surrounded with so much wildness, the comforts, intelligence, and hospitality found within, are all the more striking. A spot for a well-cultivated garden, has been made by great labor, that being one of the necessary appendages to every dwelling place of highly-improved minds.

It is seldom that I have spent a day more pleasantly to myself, and, I hope, profitably to my readers, than I did the one at Silverton, the residence of Governor James Hammond, of South Carolina, 15 miles below Hamburgh, on the Savannah River.

SOLON ROBINSON.

#### Mr. Robinson's Tour.—No. 15.

[New York American Agriculturist, 9:93-95; Mar., 18501]

[January ?, 1850]

A South-Carolina Rice Plantation.—On the 12th of January, I left Charleston, upon a small steamboat that goes up Cooper River twice a week, having an invitation to visit Dean Hall, the plantation residence of Col. Wm. A. Carson,<sup>2</sup> an extensive rice planter. Col. C. owns 3,300 acres of land, only about one third of which is cultivated, and the remainder is in the original forest. After the most approved fashion of the south, Col. C. cultivates 650 acres in rice, 90 acres in sweet potatoes, 180 acres in corn, and 26 acres in oats. The remainder of the cleared land

<sup>&#</sup>x27;Reprinted in Southern Cultivator, Augusta, Georgia, 8:85-86 (June, 1850).

William Augustus Carson, 1800-1856. Attended Harvard College. In 1821, with his mother, purchased Dean Hall plantation on Cooper River. Soon introduced engineering principles in the cultivation of rice which were in advance of his time. Purchased Cote-Bas plantation in 1831. Married Caroline Petigru, daughter of James Lewis Petigru, of Charleston. Letter of Theodore D. Jervey, Charleston, to Herbert A. Kellar, May 11, 1936. Carson, James Petigru, Life, Letters and Speeches of James Lewis Petigru, 206-11 (W. H. Lowdermilk & Co., Washington, 1920).

is taken up in gardens, yards, lots, and roads, of which last he can show a pattern worthy of imitation.

Can you believe me when I tell you that every acre of these crops is put in with hoes—that a plow is never used upon the plantation, except to scratch the ground a little between the corn rows? The rice land, being reclaimed swamp, and kept wet during the growth of the crop, is perhaps too soft to admit of using horses or cattle for draft. But why, in this age of improved agricultural implements, the sandy-loam upland should continue to be dug up with hoes, just as it was a century ago, passeth my understanding. But this is not the worst waste of labor. I have seen a hundred negroes in a lot, threshing rice with flails, winnowing it in the wind, and carrying off the straw half a mile in bundles upon their heads. Col. Carson has so far advanced in improvement as to thresh his crop by steam; but in some other labor-saving practices he is still keeping company with men of past ages.

To give readers some idea of rice cultivation, I will de-

scribe the process from the beginning.

In December and January, if the stubble is dry enough it is burnt off, and if not, it is dug up and piled, or turned under by enormous hoes, which the negroes raise high over head, and let fall with the least possible exertion of strength, and at so slow a rate the motion would give a quick-working Yankee convulsions. But the negro has his task, that is, one third of an acre, (which the said Yankee would do with a plow in two hours.) and so it is useless to expect Cuffee to move any faster than to accomplish it before dark. In March, the ground is all hoed over again, and clods broken up and drills opened with suitable hoes, 15 inches apart, and the seed drilled in by hand, and covered with a wooden baton. The water is then let on for a few days until the seed is sprouted, and then it is drawn off. When the plant attains the fourth leaf, go through with the hoes, and if the weather is favorable, hoe again before letting on the water, or let it on at once for ten to twenty days, and then draw off and clean out the grass, and then let on the water, and keep it on until the grain is ripe, which is the last of August. It is cut with sickles, bound in small sheaves, and, of course, carried off upon the negroes' heads, either to hard land, where it is carted, or to flat boats along the shore, or in some of the large canals through the fields. From the boats, it is carted or carried to one great stack yard, where it is put up in very handsome round stacks, or long ricks, upon beds graded so as to carry off all rain water. As soon as possible after the crop is secured, the threshing commences, and requires a great number of hands to carry the sheaves to the machine, and take away the straw and chaff, and put up about 500 bushels of cleaned grain a day in the store house.

As soon as there is a stock on hand, the process of hulling commences. I will endeavor to describe this process particularly.

The mill is driven by tide water, and will hull about 500 bushels a tide, which rises here six feet; Col. C., however, intends to get a steam engine, so as to be able to run constantly. The rough rice is brought from the store house and emptied into a bin upon the lower floor, from which it is carried by elevators to the third story and passed through a large fanning mill; and then through a threepart screen, to separate the sand that is too heavy to be blown out, and divide the small rice from the large grain as much as possible, as it is important to have all of nearly the same size passing between the stones at the same time. From this screen, the rice falls to a pair of six-foot mill stones, which run just close enough together to rub off the hulls of the most of it. From here it is again elevated, and passed through another fan that blows off the hulls and spouts them out doors. Then it passes through another screen that separates the grains that passed through the stones whole without being hulled. and the hulled grains, together with perhaps ten per cent. that will not hull, falls down to the mortars on the lower floor. These are twelve in number, holding five

bushels each. The pestles are about ten feet long, shod with iron, and are lifted by cogs in a shaft, and let fall a couple of feet, striking some inches down into the grain in the mortar at every blow. This operation is continued about two hours, which reduces the unhulled grains that passed through the stones to powder, and also takes off the pellicle from the hulled grain. It pounds best, but breaks most in warm weather. When sufficiently pounded, the pestle is thrown out of geer and the mortar emptied and refilled from spouts, and the pounded rice again elevated to another screen that separates the flour, broken rice, and whole rice, and sends over the end some of the largest grains and hulls, which has to be screened again. From this screen, the broken rice falls into a fan to blow out the flour, and the whole rice into the brush or rubber that cleans off everything and gives the grain a polish; and from this, it falls into the casks, which hold about 600 lbs. each. A simple piece of machinery keeps the cask turning around while filling, and at every quarter round it is struck by a wooden mallet, which settles the grain and fills the cask to its utmost capacity.

It takes about 20 bushels of rough rice to make a barrel of 600 lbs. The weight of good rice is from 45 to 48 pounds to the bushel; and the proportion of good rice, broken rice, and flour, and value, may be understood from the following account of a parcel sent forward by Mr. Reed, from a neighboring plantation:—

50 hughele made 00 bble

2,150 bushels made 89 bbls., weighing
54,222 lbs., which sold for 3c.,\$1,626.66
1 barrel given away, say 600 lbs., 18.00
1 barrel middling, 628 lbs. at 15/8c., 10.20
\$1,654.86
4 barrels small or broken rice.
202 bushels of flour.
The charges on the lot for freight,
hulling and commissions, 305.34
Net proceeds,

Or a fraction less than 65 cents per bushel, exclusive of the broken rice and flour. The first is just as valuable for food as the whole grain, and is used for feeding the people; and the flour is worth as much as corn meal for stock.

The average crop of rice upon the Cooper-River lands, may be set down at 40 bushels. Upon some small tracts, 90 bushels to the acre have been made.

Col. Carson's last crop was 800 bbls. which is about six and two thirds barrels to the hand, and 24 bushels to the acre. This, he says, is less than half a usual crop, owing to the dry season, which kept the river so salt that he could not flood the crop when most needed.

The average yield of corn he estimated at 15 bushels, oats 20 bushels, and sweet potatoes 100 bushels, to the acre. The corn ground is "listed" in the winter; that is, all the stubble and trash hoed into the space between the rows and covered with earth. Upon this additional dirt is hoed, and the corn planted about the 20th of March till 20th of April, and thinned to one stalk, two and a half by five feet. Oats are planted in drills by hand in January and February, and cultivated with hoes. Sweet potatoes are planted from middle of March to middle of April, and by layers, (that is, cuts of vines,) until July. He usually plants about one fourth of his crop with seed and the balance with layers. Corn is ripe in August, and usually harvested in October. He aims to cultivate six acres of rice to the hand, and upland enough to furnish them all the corn and potatoes they can eat. Upon none of the rice plantations is it customary to give rations of meat; and it is alledged that the people are more healthy upon vegetable food.

Col. Carson made one year 45,000 bushels of rice with 120 hands, which is 375 bushels to the hand, and 75 bushels to the acre.

The estimated value of a rice plantation is from \$150 to \$200 an acre for the rice land, and nothing for the remainder; so that in purchasing Dean Hall, at the highest price, you would get the whole tract for about four dollars an acre, including a very large tide-water hulling mill,

steam threshing mill, steam saw mill, a noble mansion, a very good lot of negro houses, overseer's house, barns, stables, store houses, shops, &c., enough to make up a town in California worth a million.

The rice lands were originally covered with cypress and cedar, and the amount of work required to clear and embank them, not only around the outside, but to divide into suitable tracts for flooding, and ditch them every hundred feet, and then to keep the ditches and banks in repair, is almost inconceivable.

As the flooding of the rice land keeps it in a state of constant fertility, all the straw can be used as manure upon the upland, and with a more rational system of cultivation, by the use of the plow, it might be kept in a state of great productiveness.

One of the great drawbacks to all these beautiful places along Cooper River, is the necessity of leaving them every summer to seek a more healthy location. Col. Carson goes to Sulivan's Island, a spot noted in American history, where he keeps a house furnished and standing empty half the year; and while that is occupied, the one at the plantation is idle. The same difficulty affects nearly all the rice and sea-island cotton plantations in the lower part of the state. The whites cannot live upon them, while the negroes remain perfectly healthy. So that though their income may appear to be larger than in some other sections, their expenses are proportionately greater, and this should teach us all to be more content with our lot in life.

Col. Carson estimates his proper plantation expenses at \$5,000 a year; that is,

For clothing, taxes, and medicine,	. \$3,000
Overseer's wages,	. 1,000
Engineer's wages,	. 300
Repairs of machinery and oil,	. 200
Iron, lumber, staves, and hoop poles,	. 300
Sundry items,	. 200

<sup>&</sup>lt;sup>1</sup> Fort Moultrie, on Sullivan's Island, guarded Charleston's harbor against British attacks during the Revolutionary War.

This, of course, does not include anything for ordinary family expenses, which are no small item in a house, where, besides all the world of acquaintances, every respectable stranger finds a home and a most hearty welcome, from a most noble gentleman and lovely lady.

During my exceedingly pleasant visit here, I had the satisfaction of making the acquaintance of nearly all the gentlemen in the neighborhood. Upon the opposite side of the river, from Dean Hall, is the plantation of J. Withers Read, who has ponds of fresh water covering 100 acres of upland, which are held in reserve to water the rice fields when the river is too salt. He threshes his crop by horse power, and sends the grain to Charleston to be hulled, where there are several very large steam mills, though more perfect, yet upon the same principle as Col. Carson's. The toll is  $7\frac{1}{2}$  per cent., and the mill keep the offal.

Mr. Robinson's Tour.—No. 16.

[New York American Agriculturist, 9:118-19; Apr., 18501]

[February ?, 1850]

Georgia Farming.—Augusta is one of the most flourishing towns in the south. It contains 8,000 or 9,000 inhabitants, and is situated at the head of steam navigation on the Savannah River; built upon a broad plain of rich alluvial soil, and is a place of a large trade. Two of the principal streets are about two miles long, and each one 160 feet wide. It is also the terminus of the Georgia Railroad, which already extends into Tennessee. The city is now engaged in a stupendous work nearly completed, by which the best water power in the Union is provided. This is done by tapping the Savannah, seven or eight miles above the city, with a navigable canal, which is brought down just to the edge of the town, and then the water drops from the first to the second level, 13 feet. and then is carried about a mile along a natural ridge. from which it is taken by short cuts, with 13 feet more

<sup>&</sup>lt;sup>1</sup>Reprinted in Southern Cultivator, Augusta, Georgia, 8:87 (June, 1850).

fall to the third level, that carries the water through another canal into a natural hollow, and back into the river above the city. The work is done at the expense of the city corporation, which will receive a revenue for water rents. The navigation of the canal is made free, as by that thousands of bales of cotton come to Augusta market. There is now in operation one beautiful cotton factory of 9,000 spindles, and another of the same sized building. There are two excellent merchant flouring mills in operation, and a sawmill and some other works, and a large machine shop nearly ready; and there is ample room and water for a hundred or two more. Good materials for brick abound upon the spot, and coal, iron, lime, and granite up the railroad; and then the location being healthy, why should it not become a great manufacturing town? There is also a railroad 136 miles, to Charleston, which makes Augusta within five days of New York.

But the best of all, is the fact that the town has a population equal in point of character to any other, north or south; and is surrounded with some of the best and most enterprising farmers in Georgia. Among others, I may be permitted to mention Messrs. Eve, Delaigle, Coleman, Miller, and Moore. The first is one of the

<sup>1</sup> William J. Eve, Richmond County, Georgia, was an exhibitor at the Stone Mountain Cattle Show, 1848. Southern Cultivator, 6:145 (October, 1848).

<sup>2</sup> Mr. Delaigle, Augusta, Georgia, had a celebrated Cherokee Rose hedge. *Ibid.*, 6:46, 101 (March, July, 1848); 9:74 (May, 1851).

\*James L. Coleman, Augusta, Georgia. Planter. Interested in wheat culture in the South. With John Cunningham, established a mill on the Augusta Canal and offered prizes for the best wheat grown in that vicinity. Maintained a fine orchard of over one hundred acres of choice trees. *Ibid.*, 6:169 (November, 1848); 9:192 (December, 1851); *American Farmer*, 4th series, 4:412 (June, 1849).

'Probably Andrew J. Miller (1806-1856), lawyer, state representative, and state senator. Born in Camden County, Georgia. Aided greatly in securing the construction of the Western and Atlantic Railroad. *Memorial History of Augusta, Georgia*, 240-41 (D. Mason & Co., Syracuse, N.Y., 1890).

<sup>6</sup> The wheat culture of M. B. Moore of Augusta, Georgia, is mentioned in the Report of the Commissioner of Patents, 1849, pt. 2:209,

most enterprising and thorough-going sort; as is most apparent in his work as contractor upon the water works and canals; while at the same time, without the assistance of an overseer, he has carried on his large plantation, three miles below town, having made about 20,000 bushels of corn last year, besides a large quantity of other things for sale, with 30 hands, 28 of whom were females. This he has done from a thorough knowledg of the value and art of making manure.

The average yield of corn here, one year with another, is about 25 bushels to the acre—oats the same, though he has made 80 bushels. Mr. Delaigle told me that he had frequently made 300 bushels of sweet potatoes to the acre.

His premises are well worth visiting, both by northern and southern farmers. The first would see how a southern farmer, born upon the spot, can make and use manure, and see yards, stables, cattle sheds, stock, tools, buildings, and farming in its most comprehensive sense, equal to anything of the kind in his own country. The latter would see an example worthy to be followed.

I noticed in the cattle yard, a vast quantity of oak and other leaves, mixed with the manure. This is now being hauled out and dropped in heaps and covered; and in the fore part of April, the corn is planted in checks four feet by six, two stalks in a hill to stand, and each hill has a shovelful of this coarse manure, and a handful of lime, which he makes from oyster shells, "picked up about town."

Mr. D.'s sweet potatoes, of which he raises from 3,000 to 5,000 bushels a-year, are kept in a brick house, of which about five feet are above and five below ground. The potatoes are dug and put away as rapidly as possible, after commencing, and have a layer of fine straw next the walls, and several ventilators through the heap, made of four boards full of holes, nailed together. Over these are trap doors, into the cockloft, which has outside ventilators, to open and shut as required. In this way, with the

least possible trouble, he keeps sweet potatoes through the winter and well into summer.

Mr. Eve's plan of manuring is different from Mr. D.'s, as he spreads all broadcast and plows it in; and he prefers to give the lots manured a thorough dressing at once, instead of scattering it over a wide surface. All of these bottom lands would be improved, most undoubtedly, by underdraining. But that never can be done while the owners cultivate so much land. And it is one of the hardest undertakings to convince planters that they would be richer if they did not own half so much. This "swamp land," as it is termed, was once considered inexhaustably fertile, and yet, it is now proved by those gentlemen, as well as others, that no part of their labor pays a more certain profit than manuring.

Upon the subject of using oak leaves for manure, Mr. N. B. Moore, who has had a good deal of experience, says that he considers them about the poorest vegetable substance he has ever tried. He prefers broom straw, or even fine straw, and certainly any kind of weeds, crab grass, corn stalks, or straw of any kind of grain.

All of these bottom lands are liable to overflow, excepting when the water is kept back by dams, or levees, as is the case upon a very great portion of all the river lands of the southern states. They also have the reputation of being unhealthy, and of affording as fine a growth of musquitoes as the greatest lover of that kind of music could desire. Of the latter, I have no doubt. As to health, I believe that draining and liming, and improving cultivation will cure that.

Mr. Moore cultivates his farm principally for hay, to sell in town, but he has learned that no land, not even the Savannah-River Bottom, can be stripped of a crop every year, and yet continue to give, and so he keeps carts constantly gathering up manure in the city, which he puts on the land at the rate of one horse cart load every 20 feet, upon every bed, which are all laid off 20 feet wide. The manure is first picked up about town, with carts and

taken to a pile on a vacant lot, and from there is hauled to the farm in two or four horse wagons, and put in a big pile, with a good coat of locomotive cinders, and coal ashes covered over the top, where it is thoroughly rotted before using; for it is composed of all manner of things gathered up in the streets, yards, and stables. As soon as possible after it is hauled on the land, it is plowed in about two or three inches deep in winter, and in the spring, after the weeds have got well under way, he plows them all under, five or six inches deep, and sows millet. oats, peas, barley, clover, grass, &c., and harrows in; thus killing the weeds and allowing the crop to get a fair start. All the produce is sold or used as hav, and also a crop of crab grass. Of the latter, he cut up a crop some years ago from among the corn upon 100 acres, which he sold for \$600.

Mr. Moore, it is proper to remark, was not bred a farmer, though now one of the best in the country. That is, he makes as much, if not more to the hand, than any other man in that region; and all because he understands the value of manuring, and following a judicious system of cultivation, instead of the too common skinning one. Besides the profitableness of his farming, his farm is kept in the neatest order of any one in that neighborhood of neat farmers. Altogether, his example is worthy of commendation, and profitable to be noted and followed.

MR. ROBINSON'S TOUR.—No. 17.
[New York American Agriculturist, 9:148-49; May, 1850]

[February ?, 1850]

North-Carolina Farming. — Having heretofore given some items of the products and expenses of cotton, sugar, rice, and wheat culture, I will now give, by way of comparison, the amount of expense and sales of a corn plantation on the Roanoke River.

The tract contains 1,785 acres, valued at \$13 per acre. About 1,250 acres of it are open land; 650 usually in corn, the remainder in grass, or "resting." It is composed of

rich alluvial bottoms, which are liable to overflow, and "high land ridges," that are comparatively poor. corn is usually planted upon the richest land. 1 foot by 5. and on the upland, 4 ft. 9 in. by 3 ft. 3 in., one or two stalks to the hill. The average yield, last year, 29 bushels to the acre. The land is deep plowed with two or three horses or mules, and almost exclusively worked with plows, particularly upon the upland, and at the last working, sowed with peas. These are fed off by cattle and hogs, of which more are kept than enough for plantation use, though the proprietor is of opinion that keeping cattle upon a grain farm, is poor business. His cattle only pay six per cent. Hogs should only be kept to just that extent required for home consumption and to eat the offal. Feeding corn, at 50 cents a bushel, makes dear pork. Hogs are considerably fattened upon peas and oats, the latter being sown in large quantities to furnish pasturage for hogs and horses. Corn is usually planted the last of March or first of April, and is ripe enough to commence gathering the second week in October. [?]

The following tables of expenses and sales will be found interesting. It is to be presumed that a full supply of wool for clothing the negroes is grown upon the place, and that the proprietor never bought an article of provisions. The usual average number of hogs, about 200 head, and cattle 100 head. Horses, mules, and colts, 30, sheep, 100. Stock winter in the corn fields. All the land, except some wet spots, is cultivated upon the "level system." That is, the ground is plowed as deep as it can be, and then furrowed with a two-horse plow and planted in the bottom of the furrow, and covered with plow or cultivator. Great benefit has been derived from ditching, draining, and deep plowing; and that, the proprietor believes, will improve almost any land, and increase its productiveness as it will be seen has been done upon this.

# 1844.—PLANTATION EXPENSES—25 FULL HANDS, 19 PLOWS.

Overseer's wages,	\$160.00
Hire of 8 hands,	210.00

Clothes and taxes for hired hands,	50.00
Bagging and rope,	91.56
Iron, salt, and plows,	45.00
Clothing bought,	25.00
Hats and blankets,	36.00
Taxes on negroes,	50.00
Physician's bill	40.00
·	
	\$707.56

80 acres of cotton made this year, yielded 1,500 lbs. an acre of seed cotton. Interest on \$31,500 capital, 6 per cent., \$1,890. Amount of sales, \$4,840.25, or a fraction less than 16 per cent. on capital.

#### 1845.—22 HANDS—14 HORSES.

Overseer's wages,	\$200.00
Hire of 4 hands,	158.00
Nails, spades, shoes, &c.,	13.00
Salt, \$12, taxes, \$55,	67.00
Physician's bill,	45.00
	\$483.00

Capital same. Sales \$4,138.78. Credit plantation for articles at selling prices. \$298.34. Total, \$4,437.12. Crop all corn, 540 acres, 12,975 bushels, or 2,595 barrels, sold for \$2.58 a barrel, at home. Net to hand, \$181.75, over 15 per cent. on capital.

### 1846.—24 HANDS—15 HORSES.

Overseer's wages,	\$225.00
Nails and salt,	17.63
Plows, scythes, &c.,	54.67
Clothing and leather,	20.52
Hats and blankets,	52.02
Cotton cloth, plows, &c.,	53.25
Cotton yarn, \$13, taxes, \$60,	73.00
Hire of one hand,	50.00
Physician's bill,	80.00

\$626.09

Sales, \$4,828.18. Corn at \$3.64 a barrel. Crop lost by flood on low ground. Net to hand, \$173, and over 14 per cent. on capital.

### 1847.—26 HANDS.

Overseer's wages,	\$250.00
Hire of one hand,	40.00
Salt \$16, leather, yarn, &c., \$21.50,	37.50
Nails, leather, cloth, and sundries,	100.36
Cutting oats, \$10, taxes, \$60.	70.00
Blacksmith's bill,	68.92
Physician's bill,	52.25
Lard kegs, \$9.88, plows, \$15,	24.88
	\$643.91

Sales, \$5,983.17. 600 acres of corn, sold at \$2.46 a barrel. Net to hand, \$205.75.

## 1848.—28 HANDS—CAPITAL \$42,765.

Overseer's wages,	\$275.00
Hire of two boys,	108.00
Salt, \$14, taxes, \$68,	87.00
Cloth, leather, hats, &c.,	136.47
Cutting oats and wheat,	12.00
Shoes, \$9, blankets, \$32,	41.00
Iron and plows,	68.00
Physician's bill,	47.00
Blacksmith's bill,	65.92
	00.10.00

\$840.39

Sales, \$5,006.51. Corn \$2.12 $\frac{1}{2}$  a barrel—650 acres. Net to hand, \$148.75.

The proprietor has just commenced the use of lime and is of opinion that it will pay a profit upon the expenditure more certain than any other outlay he can make. The Roanoke Bottoms, that are overflowed upon an average once in seven years, will yield eight and a half barrels of corn to the acre, including years of loss. The average value of such land is about \$15 an acre. The

uplands, may average \$2.50 an acre, and yield about two barrels, (ten bushels,) to the acre. The best corn land on the river will average 10 barrels.

In connection with this subject, I give the following statement of another place near Tarborough, upon which the principal crop is cotton. The average number of full hands, 25, and average amount of expenses per annum, \$650, of which 300 is for overseer's wages. It is worthy of remark, that the same overseer has been in the same employ fourteen years. The proprietor took possession of the place in 1844, and the sales that year amounted to \$1,500.

In 1845, \$2,500. 1846, \$4,200. 1847, \$4,500 1848, \$4,600. 1849, \$4,200, leaving still on hand about \$400 worth of surplus. During the same time, complete new buildings and fences have been erected, and the value of the land more than doubled, and more than quadrupled in productiveness.

Now how has this been accomplished? By ditching and draining swamp land, naturally rich, but too wet to produce any crop; by using improved plows, and plowing the old fields up deeply; by creating manure for the poor barren sands; but principally by digging and spreading immense quantities of marl, or rather, seashell deposites, which, until now, had lain idle and useless, while the former owner was starving. This marl contains about thirty per cent, of carbonate of lime, and in some instances has been used at the rate of 600 bushels to the acre, so that from being one of the poorest, this farm has now become one of the most productive in the country. His average to the hand, last year, was \$222, and although cotton brought a high price per pound, his crop was unusually light—200 acres produced 53,000 pounds. He makes all his provisions, and nearly all his clothing. His rations are five pounds of pork per week, for all field hands, and all the bread and vegetables they will eat. He now averages six barrels of corn to the acre upon land, that, before it was marled, would not average two. Plants cotton last of April and corn first of May.

MR. ROBINSON'S TOUR.—No. 18.

[New York American Agriculturist, 9:187-88; June, 18501]

[March ?, 1850]

Visit to Jehossee Island-Rice Plantation of Ex-Govenor Aikin.2—I hope my readers have read with some degree of interest, my account of Col. Carson's rice plantation, in the March number of the Agriculturist. The minuteness of that description will enable me to shorten the present one. I left Charleston on the morning of January 25th., which was like a mild summer day in autumn with us, and followed the windings of a crooked, narrow channel, through which small steamboats run towards Savannah by the inside channel to Beaufort. We were several times interrupted by meeting large timber rafts that come down the Edisto River, and through this passage to Charleston, and had to wait till they could be separated, to give us a passage through this fit abode of aligators, that are often to be seen "as thick as three in a bed."

Although my point of destination was only thirty miles direct from the city, I was twelve hours on the passage. This island contains about 3,300 acres, no part of which is over ten or fifteen feet above tide, and not more than 200 to 300 acres but what was subject to overflow until diked out by an amount of labor almost inconceivable to be performed by individual enterprise, when we also take into account the many miles of navigable canals and smaller ditches. There are 1,500 acres of rice lands, divided into convenient compartments for flooding, by substantial banks, and all laid off in beds between ditches 3 feet deep, only 35 feet apart. Part of the land was

<sup>&</sup>lt;sup>1</sup> Reprinted in part in De Bow's Review, 9:201-3 (August, 1850).

<sup>&</sup>lt;sup>2</sup> William Aiken, born January 28, 1806, at Charleston, South Carolina; died at Flat Rock, North Carolina, September 6, 1887. Planter, statesman, philanthropist. Developed his rice plantation on Jehossee Island into a model of its kind. State representative and senator, 1838-1842; governor of South Carolina, 1844-1846. Representative in Congress, 1851-1857. See sketch in *Dictionary of American Biography*, 1:128-29.

tide-water marsh, and part of it timber swamp. Besides this, Gov. A. cultivates 500 acres in corn, oats, and potatoes: the balance is gardens, vards, lawns, and in woods, pasture, and unreclaimed swamp. Wood is becoming scarce on the island, so much so, that he drives the steam engine to thresh the crop, by burning straw, which answers a good purpose, but is of doubtful economy: though he intends carefully to save and apply the ashes, which are very abundant, and note the difference in value, between that application and the manure made from the decomposed straw. It is generally calculated that two thirds of the straw will be sufficient fuel to thresh the crop: but Governor Aikin has not found it so. He says there is no more danger of fire in the use of straw than in any other fuel. The flue is carried off fifty or sixty feet along the ground and there rises in a tall stack that never emits any sparks. Sugar planters, and all farmers who use steam, may do well to notice this. I recollect Mr. Burgwyn carries his off from his barn in the same way, with the same effect.

Governor Aikin, however, has one improvement that I recollect mentioning to Mr. B., that he would require; that is, a "man hole" into this flue, to enable him to clean out the great accumulation of cinders at the bottom of the stack. In Gov. A.'s, there are two which are closed by iron covers.

The threshing apparatus is a most convenient one. The sheaves are brought from the stacks in the great smooth yard, to a large shed where all the sheltered grain can be saved, and are there opened and laid on carriers, similar to cane carriers, which carries them up to these machines in the second story, where the grain is separated from the straw, and falls down into winnowing machines, from whence it is removed by hand, (it might be carried by machinery,) to another part of the building over a canal, and is let down into boats to carry about half a mile to the hulling mill, which is exactly like Col. Carson's, and driven by tide. It is carried from the boats to

the mill by hand, or rather head, where a little head work of another kind would take it up out of the boat by elevators.

The straw is consumed almost as fast as threshed. And here the saving of labor in getting wood, as well as the saving of labor stacking the straw and hauling manure, must be taken into account, as an offset to the loss of manure in burning the straw.

The rice for seed is always threshed by hand, as experience has taught that the vitality of a considerable portion is injured in the threshing machines. It is just so with wheat. [An experienced farmer thinks about one grain in 500 is injured by threshing with machines, and as about 6 per cent. by the last process, there is still a great pecuniary advantage in favor of threshing with a machine.—Eds.] The quantity of seed to the acre is 2 to 3 bushels, planted in drills 15 inches apart, opened by trenching plows, and singular as it may sound to some other rice planters, Governor Aikin plows all of the land that will bear a mule or horse, of which he works about forty and twenty oxen.

Corn is generally planted in hills, upon the upland part of the island, which is sandy, 4 by 5 feet, two stalks in a place, and yields an average of 15 bushels per acre. Corn upon the low, or rice land, does not yield well, though it makes very large stalks. With sweet potatoes, on the contrary, the low land produces nearly double, and of better quality, averaging 200 bushels to the acre, and frequently 400 bushels. The average yields of rice is 45 bushels to the acre, and upon one eighty-acre lot the average yield is 64 bushels. The crop upon that lot last year was 5,100 bushels, weighing 234,600, lbs. that is 46 lbs. to the bushel. This made 229 barrels of whole rice, two barrels of middling, and two and a half barrels of small rice, which, at 600 lbs, each, (probably about 20 lbs. below the average,) would make 140,100 lbs. This, at three cents, will give the very snug sum of \$4,203 for the crop of 80 acres.

The average annual sales of the place do not vary materially from \$25,000, and the average annual expenses not far from \$10,000, of which sum \$2,000 is paid the overseer, who is the only white man upon the place, besides the owner, who is always absent during the sickly months of summer. All the engineers, millers, smiths, carpenters, and sailors are black. A vessel belonging to the island goes twice a week to Charleston, and carries a cargo of 100 casks. The last crop was 1,500 casks—the year before, 1,800, and all provisions and grain required, made upon the place. Last year, there was not more than half a supply of provisions.

Like nearly all the "lower-country plantations, the diet of the people is principally vegetable. Those who work "task work" receive as rations, half a bushel of sweet potatoes a-week, or 6 quarts of corn meal or rice, with beef or pork, or mutton occasionally, say two or three meals a-week. As all the tasks are very light, affording them nearly one fourth of the time to raise a crop for themselves, they always have an abundance, and sell a good deal for cash. They also raise pigs and poultry, though seldom for their own eating. They catch a great many fish, oysters, crabs, &c.

The carpenters, millers, &c., who do not have an opportunity of raising a crop for themselves, draw large rations, I think a bushel of corn a week, which gives them a surplus for sale. The children and non-workers are fed on corn bread, hommony, molasses, rice, potatoes, soup, &c.

The number of negroes upon the place is just about 700, occupying 84 double frame houses, each containing two tenements of three rooms to a family, besides the cock loft. Each tenement has its separate door and window and a good brick fireplace, and nearly all have a garden paled in. There are two common hospitals, and a "lying-in hospital," and a very neat, commodious church, which is well filled every Sabbath with an orderly, pious congregation, and service performed by a

respectable methodist clergyman who also performs the baptismal, communion, marriage and burial rites.

There is a small stock of cattle, hogs, and sheep kept upon the place for meat, which are only allowed to come upon the fields in winter, under charge of keepers. The buildings are all of wood, but generally plain, substantial, and good. There is a pretty good supply of tools, carts, boats, &c., and the land is estimated to be worth

\$100 an acre for the rice land, which would be	\$150,000
The 500 acres upland, \$25 per acre,	12,500
The negroes, at \$300 each,	210,000
Stock, tools, and other property, say	7,500

\$380,000

which will show a rather low rate of interest made from sales of crops, notwithstanding the amount of sales look so large.

Now the owner of all this property lives in a very humble cottage, embowered in dense shrubbery, and making no show, and is, in fact, as a dwelling for a gentleman of wealth, far inferior in point of elegance and convenience, to any negro house upon the place, for the use and comfort of that class of people.

He and his family are as plain and unostentatious in their manners as the house they live in; but they possess, in a most eminent degree, that true politeness and hospitality that will win upon your heart and make you feel at home in their humble cot, in such a manner that you will enjoy a visit there better than in a palace.

Nearly all the land has been reclaimed, and the buildings, except the house, erected new within the twenty years that Governor Aikin has owned the island. I fully believe that he is more concerned to make his people comfortable and happy, than he is to make money.

LETTER TO MARIAH ROBINSON

[Ms. in Harry Robinson Strait Papers, Gary]

LANCASTER CO. VA. May 9th 1850.

MRS. MARIAH ROBINSON.

My DEAR WIFE.

Knowing from sad experience how very unpleasant it is to be cut off from all communication with you. I must not neglect any longer to let vou hear from me, as I can get a letter away tho' I cannot get one sent to me because I cannot fix upon any point ahead where one can be sent to me from New York, and I have had no communication from Mr. Allen since I left Fredericksburg Apl. 22. and shall not be able to unless I take a steam-boat to Baltimore on purpose, which I am inclined to do. as I find it very impolotic for me to leave this part of the country as soon as I expected, as I am engaged in doing a very large business for the firm, of which I expect to reap a fair per centage of profit to myself. I have sold within the last ten days Twenty Thousand Dollars worth of merchandise, mostly Guano, which is extensively used as a manure for wheat in several counties here.

You may judge that I have been pretty busy & if I have neglected to write you it is because I had such an amount of business on my hands. I wrote some 20 letters last sunday, and have been engaged in writing almost every night until 12 O'clock, except last night I went to bed early with a bad cold which has nearly given me the ague to day, as it was scalding hot forenoon & then a shower & chilly this evening: so much so that I stopt before night, as usual at a gentleman's house where I am always welcome, and treated with great respect & kindness.

The best of wheat here now is knee high. Corn nearly all up & some being plowed the first time. Peaches about as big as large peas. Apple blossoms off. Forest trees all in green leaves. Strawberries in bloom. And it is called a most unusual backward spring.

I hope you have a more forward one with you. I cannot yet tell until I hear again from Mr. Allen, when I shall be in New York, or when I shall be able to go and make you a visit, but I hope next month.

I wish you would have Josephine make out a memorandum of things for me to buy in New York, & send me at once as I may be there by the time you get this possibly.

I wish I knew whether you were in want of money, as I would send you a draft. I hope however that somebody will pay enough for you to live upon while I am away, and that you will live more comfortable than I do the most of the time; for although stopping with the richest portion of the people they are very plain livers in this part of Virginia & it would be a great treat to me in that respect if I could be treated by you.

You may rest assured that I never forget my home, in all my wanderings & wish I was there to enjoy the affection of a much loved wife & children. And I would have you & them ever believe that I am truly your affectionate husband & their loving father

SOLON ROBINSON.

## YAUPON TEA.

[New York American Agriculturist, 9:194-95; June, 1850]

[May ?, 1850]

"What sort of tea did you say, sir?" Yaupon tea, ma'am. I cannot give you the exact orthography of the word. It may be yopon, yawpon, yuopon, or yoopon, as I have never seen it written, and it sounds from the mouth of different individuals, like each of the above words.

"Well, never mind how it's spelled, but do tell us what it is like, and where it is used, and where it comes from, and all about it."

<sup>1</sup> Robinson did not exhaust all the possibilities. Yapon, youpon, and vupon are also listed by Webster's Dictionary as variant spellings for yaupon, a species of holly, the leaves of which are used as a substitute for tea.

Yes, ma'am, and so I might as well begin at the begin-Tradition says it was first discovered upon the desert coast of Virginia, south of the Chesepeake Bay, or upon the equally desolate shore of North Carolina, and for a long time was only known to one family of Indians, who used to prepare it, and sell it to the early settlers of that country. It now grows abundantly, both wild and cultivated, in all that region and among the primitive inhabitants is almost exclusively used instead of coffee or "store tea." The shrub somewhat resembles the box. is evergreen, of rather a pale color, grows ten or fifteen feet high, and is most natural to a poor sandy soil, or rather land without soil; that is, all sand. The bark, leaves, and twigs are all made use of; but I believe the young shoots are preferred. For winter use, they are gathered in the fall and laid in a trough, chopped up somewhat fine, and then put into an iron pot which is carefully heated, to wilt the leaves; then the whole is packed away in earthen jars, or dried, and is made by infusion in the ordinary way of making "Hyson," "Souchong," "Oolong," or any other ong, and makes quite as good a drink as one half of the China teas in the country.

Great faith is placed in the medicinal qualities of yaupon tea, by the people of the country where it grows. It is related of a North-Carolina gentleman, who once had a very bad cold, while at the Astor House, in New York, and called for some yaupon tea, and on the waiter expressing some doubts about being able to find the article, as he had never heard of it before, he thought him very ignorant and wondered where he came from not to know what vaupon tea was, as he had seen it and smelt it upon the table every day since he had been there; having mistaken the black tea for the real "native American" article. Certain it is, that it is a tea very much esteemed by a great many people, and it is worthy of inquiry whether it is not deserving a more extended cultivation, and more general use. I am told that in Princess-Anne county, Virginia, a little patch of yaupon shrubs may be seen attached to nearly every house, and that hundreds of persons there never tasted of any other tea, and that hundreds of others who have tried the "boughten stuff," prefer the domestic article. I was assured by my informant that one gentleman lost the vote of the county in consequence of a story raised by his opponent, that he did not like yaupon tea, and ridiculed the use of it, and if elected, would probably go against levying a duty on foreign tea, for the benefit of the yaupon manufacturer.

To save my popularity, I therefore speak publicly of the goodness of yaupon, and that it is undoubtedly better than half the *green* tea imported into this country. And I candidly recommend its increased cultivation. It would at least afford something new, and that is more than we can depend upon when we buy a new tea with some heretofore unheard-of name.

Ladies, when shall I have the pleasure of a cup of "yaupon" with you, raised in your own garden, and cured with your own hands?

Solon.

#### BENEFIT OF GUANO.

[New York American Agriculturist, 9:202-3; July, 1850]

[May ?, 1850]

I HAVE gathered a great amount of information in my travels, upon this subject, some of which will be useful to your readers.

I presume no part of the United States can show a more marked benefit from the use of this best and cheapest of all fertilisers in the world, than the northern neck of Virginia; as in no part, with which I am acquainted, has it been so extensively used, and likely to be continued to be used, upon the next wheat crop, as here.

Mr. Willoughby Newton¹ is entitled to the credit of

<sup>1</sup> Willoughby Newton, born at Lee Hall near Hague, Virginia, on December 2, 1802; died at Linden, Westmoreland County, on May 23, 1874. Lawyer. Member of House of Delegates, 1826-1832, 1861-1863. Elected as a Whig to the Twenty-eighth Congress, 1843-1845. Resumed practice of law and engaged in agricultural

having first introduced it into that section, and he now says that he looks upon it as an interposition of Providence, to save the country from total ruin, as most of the land had become so utterly exhausted as not to be worth cultivating, and nearly all the ridge or "forest land," as it is termed, had been abandoned as worthless, and suffered to grow up to old-field pines, which in time were cut down and burnt, and the land planted, and after bringing two or three miserable crops, suffered to grow up again. The soil is generally a sandy loam, based on a reddish-yellow clay, and in many places by shallow plowing and bad management, very much washed and its native fertility wasted.

Mr. Newton's first experiment was upon such land, so "deadly poor" that it had long been considered useless to try to raise wheat, rye, or oats upon it, and it only afforded a very scanty crop of "poverty" or "hen grass." In 1846, he purchased a ton of Ichabo guano, about equal to half a ton of Peruvian, and put it upon eight acres, plowed in, upon which he sowed eight bushels of wheat, amid the jeers of some, and doubts of all his neighbors, that he never would see his seed return to him in the crop. Even his negroes thought "massa hab done gone crazy sure, to tink he raise wheat on dat land, caze he put few pinch of snuff on him." The result, however, was 88 bushels, and a good stand of clover.

In 1847, Mr. N. purchased \$100 worth of Patagonian guano, and used it upon equally poor land, and obtained 330 bushels good wheat, when he certainly could not possibly have made 100 bushels without guano, by the best manuring he would have been able to give it. In 1848, he used \$200 worth of Patagonian and Chilian, at \$40 per ton for one, and \$30 for the other, and made 540 bushels of such fine wheat that it sold readily, for seed, at \$1.25

pursuits. President of the Virginia Agricultural Society, 1852. Contributor to the American Farmer, 1848-1849, 1851, and Southern Cultivator, 1851. Speaker at agricultural fairs. Biographical Directory of the American Congress, 1356; Southern Cultivator, 9:147-48 (October, 1851).

per bushel. As these experiments were so very satisfactory upon the light lands, he wished to try what benefit guano would be to soil of a different character. He therefore selected ten acres upon one of his Potomac farms, of a cold white clay, and applied one ton of Peruvian guano. which cost \$50. His overseer declared "that stuff" never would make wheat and he would beat it upon the next ten acres, which to do, he dressed with lime, and plowed finely, and put in the wheat as well as he knew how. Finding in the spring, that the guanoed wheat was getting ahead, he gave his ten acres a good top-dressing of ma-The result was 55 bushels for the limed and manured lot, while the guanoed lot gave 135 bushels of a much better quality, which also sold at \$1.25 per bushel, for seed. Here was a clear gain of \$63.75 upon an outlay of \$50, in one crop, ready money, besides the advantage to the land of getting a good growth of clover. In 1849, he used ten tons of Peruvian guano at \$47, and ten tons of Patagonian, at \$30, upon 260 acres of wheat, at the rate of 75 to 250 lbs. guano to the acre, and the result now, (May 3d, 1850.) is so promising, that he has bought 30 tons of Peruvian, intending hereafter, to use no other kind, as the wheat now growing side by side, upon which the two kinds were applied, at equal cost, shows very largely in favor of the Peruvian.

Upon one acre of sandy loam, in 1847, Mr. N. used one barrel of African guano, cost \$4, and sowed one bushel Zimmerman wheat, and reaped 17. He also used a barrel of "fertiliser," last fall, at the rate of \$12 an acre, along side of guano, at \$4 an acre. The present appearance of the crop is in exact inverse proportion.

It is the concurrent opinion of Mr. N., and others who have used it most, that an application of 200 pounds per acre, plowed in deep, [How "deep?" It will not do so well to plow guano in what we call "deep," in a northern climate.—EDS.,] and wheat sowed late, say last of October or first of November, is the most economical application, and that it will give an average increase of twelve bush-

els to the acre, for one of seed, upon poor land, and give a good stand of clover, that when turned in will give as good a crop as the first.

The land upon which the above-named crops were made cost \$4 an acre. Five miles from navigation, such land can be bought for less money.

Wm. D. Nelson, of Westmoreland county, Virginia, a near neighbor of Mr. Newton, bought the land upon which he now lives, two years ago, at \$1,600 for 400 acres. Three fourths of it was grown up in pines, and the balance, not paying interest of money in rent. The place was notoriously poor. It has a very different aspect now. Fine fields of wheat, knee high this backward spring, on the 1st of May, and most luxuriant clover, plainly tell what has been the renovating agent under a judicious management, to effect this great change. He used 200 pounds of Peruvian guano, and made 12 bushels wheat to one sowed, to the acre; and 200 lbs. of Patagonian, and made 10 bushels to one. Upon eleven acres used 2,200 lbs., and 11 bushels seed, and made 150 bushels of wheat. Upon 36 acres and 36 bushels seed, on the same kind of land that had been manured well in previous corn crop, but not guanoed, made 152 bushels. The contrast now, between wheat that was guanoed and that without, is equal to the difference between the green grass upon the wayside, and the bare beaten track. He plows in all his guano. Has bought ten tons Peruvian for 1850.

Dr. F. Fairfax,<sup>2</sup> of King-George county, Virginia, commenced the use of guano, in 1847, next year after Mr. Newton, on the northern neck, upon a piece of land so deadly poor that it would not produce any kind of grain enough to pay for planting; soil, clayey loam, hill land. His first experiment was with 400 lbs. to the acre, of

<sup>&</sup>lt;sup>1</sup> William D. Nelson exhibited fine corn-fed hogs at the Maryland State Agricultural Society fair. *The Plough, the Loom, and the Anvil*, 6:343 (December, 1853).

<sup>&</sup>lt;sup>2</sup> Probably Ferdinando Fairfax, born at Shannon Hill, January 9, 1803. Settled in King George County. Du Bellet, Louise Pecquet, Some Prominent Virginia Families, 2:179 (Lynchburg, Va., 1907).

African guano, that proved one third water, upon 27 acres, sowed with three bushels to an acre, and made 12% bushels, and upon another field from 8 to 18 bushels to the acre, and guano fully paid for in the improvement of the land by clover, which he sows with wheat, in Septem-The clover grows luxuriantly where none would grow without guano, and his wheat now, (May 1,) is knee high, and will ripen by 15th June, and bids fair to make 1,000 bushels where 150 could not have been made without guano, or 25 bushels to the acre. On some kinds of land on next farm, the wheat is barely perceptible at a little distance. Upon another farm where the land is richer, the contrast is not so great, but the doctor thinks will be equally profitable, and that it always will be found profitable upon land that would be benefitted by manure. He has bought 15 tons Peruvian guano for the next crop.

Mr. W. Roy Mason¹ put 300 lbs. of African guano at a cost of \$4.50 upon what he says was the poorest acre of land in King-George county, Virginia, and I can bring a host of witnesses to prove that that is poor enough, and got 12 bushels good wheat, and a stand of clover worth more than the guano cost. He has made other experiments so satisfactory that he has bought six tons of Peruvian for future ones.

Mr. C. Turner,<sup>2</sup> of King-George county, tried five experiments with guano.

¹Roy Wiley Mason, King George County, Virginia, owned 789 acres of land, valued at \$5,234, including the buildings; 25 slaves over sixteen years of age, 32 slaves over twelve years of age, 13 head of cattle (including horses, mules, etc.), and pleasure carriages and harness to the value of \$500. Tax list of King George County, 1850, in Archives Division, Virginia State Library. Letter of Wilmer L. Hall to H. A. Kellar, May 5, 1936.

<sup>2</sup> Carolinus Turner married Susan Rose, September 19, 1847. In 1850 he owned 1,222% acres of land, valued at \$28,153.75, including the buildings; 38 slaves over sixteen years of age, 47 slaves over twelve years of age, 22 head of cattle (including horses, mules, etc.), and pleasure carriages and harness to the value of \$800. Marriage Register of King George County, 1786-1850, and tax list of King George County, 1850, in Archives Division, Virginia State Library. Letter of Wilmer L. Hall to H. A. Kellar, May 5, 1936.

1st. Plowed in 250 lbs. 7 inches deep on corn land, and harrowed in wheat, and sowed one bushel plaster to acre on surface of part.

2d. After the land was plowed, mixed guano, wheat, and plaster, and sowed and harrowed.

3d. Land plowed, and wheat, guano, and plaster sowed and plowed in 2 or 3 inches deep.

4th. Guano and plaster plowed in five inches and wheat harrowed in.

The quantity and quality all equal. The present appearance, (April 26th,) is decidedly in favor of the first part of first experiment.

From all that I can learn, I am convinced that the best application that can be made is 200 lbs. Peruvian guano to the acre, plowed in deep, [How "deep," one inch, five, ten or twenty?—EDS.,] and that it is the most beneficial upon sandy loam, and pays the greatest profit upon lands so worn out as to be absolutely worthless for cultivation.

Col. Robert W. Carter,<sup>1</sup> of Sabine Hall, Richmond county, Virginia, a gentleman noted as one of the most improving agriculturist upon the northern neck, after thoroughly testing the various manures in various ways, has become so thoroughly convinced of its value, and the bad economy of ever sowing wheat without using it, has ordered 40 tons of Peruvian guano for his fall seeding of 1850. He plows it in deep.

No part of the United States is using guano to the extent it will be used next fall, in this part of Virginia. I have notes of a great many other experiments, and shall continue to take others for publication for the encouragement of any who may be timid about buying this most wonderful and most profitable fertiliser.

R.

¹ Robert W. Carter, a descendant of Robert ("King") Carter, the first of the family to settle in lowland Virginia. For a description of Sabine Hall and the various Carter plantations, see Phillips, *Life and Labor in the Old South*, 220-32; post, 493 ff.

#### NORTH-CAROLINA FARMING.

[New York American Agriculturist, 9:205; July, 1850]

[June ?, 1850]

When is the Best Time to Sow Clover at the South?—Mr. Henry K. Burgwyn has tried some experiments upon his plantation on the river Roanoke, in North Carolina, by which he thinks three quarts of clover seed to the acre, sown in the fall, will make as good a stand as four quarts in the spring, or rather in February, which is the usual time of sowing. The only objection to fall sowing is, that some think it injures the wheat. Mr. T. P. Burgwyn is of this opinion. On the contrary, Mr. H. K. B. thinks that the clover, that is cut with the straw, will more than make up any loss in grain, as feed for cattle and increase of manure.

Broad Wheat and Clover Fields.—Mr. H. K. Burgwyn has 500 acres of wheat now growing, 315 of which is sowed in clover, herds' grass, Timothy, or rye grass. Besides this, he has 220 acres of clover and grass from last year's sowing. Some of the clover sowed with wheat, last fall, grew two feet high. His brother, Mr. T. P. Burgwyn has 700 acres in wheat, and sowed in February 70 bushels of clover. He has good clover that was sowed in May. He says his brother's fall-sowed clover clogs the reaping machine. I will give facts—let others draw conclusions.

Deep Plowing.—Mr. H. K. Burgwyn has plowed some of his land with two four-horse plows, one after the other, followed by a three-horse subsoil plow in the same furrow. Seven horses to one furrow is a common practice of both these gentlemen. Do you hear that, ye surface scratchers?

R.

MR. ROBINSON'S TOUR.—No. 19.

[New York American Agriculturist, 9:206-7; July, 18501]

[June ?, 1850]

Sea-Island Cotton Planting.—Edisto Island, one of the largest of the South-Carolina group, about thirty miles

<sup>1</sup> Reprinted in Southern Cultivator, Augusta, Georgia, 8:115-16 (August, 1850).

southwest of Charleston, containing 5,000 or 6,000 inhabitants, is the principal point where this valuable crop is cultivated, It is a sandy soil, but little above tide, which, flowing through many channels, gives very irregular shapes to the farms, but boatable water almost at every man's door. By this means, the crop is conveyed to market, boats being substituted for wagons. There is considerable marsh, some of which has been reclaimed, and produces good cotton.

Salt-marsh mud is much used for manure at the rate of about forty one-horse cart loads to the acre. Some compost it, others put it in the cattle pens. Some dry it before hauling, and then spread upon the land. Mr. John F. Townsend<sup>1</sup> prefers to use it as soon as dug, spread upon the land wet, and plowed in. He is the only man on the island who uses plows to any extent. All the land is cultivated with hoes, upon the two-field system: that is, one field in cotton, corn, and sweet potatoes, in the proportion of about seven twelfths cotton, three twelfths corn, and two twelfths potatoes; in all, less than six acres to the hand. As the soil is generally very light, it is unproductive without manure. Therefore, as many cattle are kept as can be pastured upon the "field at rest." and the marsh and woodland. These are penned in movable yards, littered with fine straw and coarse marsh grass or weeds, which is also used to lav along between the old rows, to which muck and manure is added, and all the

¹John F. Townsend, born 1799; died 1881. Married Mary Caroline Jenkins in 1835 and lived on Wadmalaw Island across from Edisto Island, until the death of his father. Moved to Bleak Hall plantation, Edisto Island. Noted for fine sea-island cotton which he shipped to France, Belgium, and Switzerland. Raised horses, particularly marsh tackies, cultivated orchards, and grew sweet potatoes and sugar cane; raised sheep, cattle, and hogs on own plantation. Owned Sea Cloud and Shere Gold plantations, on which he also specialized in sea-island cotton, which could be planted continuously only on the three islands, James, Johns, and Edisto, just south of Charleston. Letter of John F. Townsend, Charleston, South Carolina, to Herbert A. Kellar, June 6, 1936; letter of Theodore D. Jervey to Herbert A. Kellar, May 11, 1936.

grass sod which has grown during the year is hoed down into alleys, and the bed formed upon it, keeping the bottom as solid as possible.

If the plow were substituted for the hoe, twice as much manure could be made; or what, in my opinion, would be far more economical than digging muck or keeping so many cattle merely to make manure, would be the use of guano. As this substance contains the same fertilising properties of muck, in an hundred fold degree, I would most earnestly recommend planters to try the experiment by applying about 200 lbs. to the acre, plowed in deep, or buried in the bottom of the cotton or corn beds. Make use of none but the best Peruvian, and purchase it from a reliable merchant, so as to be sure it is genuine.

It is true that cattle are easily kept here, living in winter in cotton and clover fields, eating the unmatured bolls of the former and stalks of the latter. In warm winters, there is much grass, and in summer, I believe, it is rather abundant throughout all the south.

Cotton is planted from March 20th to April 10th, upon high beds, five feet apart one way, and from eight to twenty-four inches apart the other. Corn is planted about the first of April, upon the same kind of beds, from two to four feet apart. Sweet potatoes are planted the latter part of March; also upon same kind of beds as the cotton and corn. As soon as the vines are sufficiently grown, say on the first of June, they commence planting the "slip crop." This is done by taking the vines from the seed beds, and laying along the top of other beds, and covering a part of the vines with dirt, when they immediately take root, and grow a better crop than from the seed. The bed is made rich and mellow, but the land below is kept as hard and firm as possible. The beds for cotton, corn, and potatoes are all made in the same manner and distance apart, and are reversed every other crop; that is, changed into the alleys of the preceding one, but no rotation of crops is practised. The average yield of potatoes, is about 150 bushels to the acre. Cotton, (long staple,) 135

pounds. Corn, 15 bushels of the southern white-flint variety. No other will stand the depredations of the weevil.

The amount of labor to grow and prepare for market a hundred pounds of Sea-Island cotton, is estimated at fifty days' work; that is, the small amount of labor which a negro does at "task work." The first process of preparing land for cotton, after manuring, is "listing"—that is hoeing the grass off the old beds into the alleys. A "task" of this work is one fourth or three eights of an acre a-day. Next, the old beds are hauled on top, at the same rate. The whole "task system" is equally light, and is one that I most unreservedly disapprove of, because it promotes idleness, and that is the parent of mischief.

The system of upland-cotton and sugar planters, of giving the hands plenty to eat, and steady employment, is a much better system. Meat is not generally fed to the laborers in this part of the state. The diet is almost exclusively vegetable, varying upon different plantations somewhat. The following are the weekly rations upon four places, which will give a general idea.

1st. One bushel potatoes a-week from about October 1st to February 1st. Then one peck of corn, ground or unground, as preferred, or one peck of broken rice. Meat occasionally.

2d. One bushel potatoes, or 10 qts. corn meal, or 8 qts. of rice, and 4 qts. of peas, with occasional fresh meat, and twenty barrels of salt fish and two barrels of molasses during the year. Number of people 170.

3d. Half a bushel of potatoes, 6 qts. of meal, and about 2 lbs. of fresh meat, or 10 qts. of meal, or 10 qts. of rice. Carpenters, millers, drivers, and others, who do not raise crops and hogs for themselves, have a much larger allowance.

4th. Half a bushel of potatoes, or 10 qts. of meal, and at times, when the labor is hard, a quart of soup a-day, and in light work twice a-week. This is made of 15 lbs. of meat to 75 qts. of soup, thickened with turnips, cab-

bage, peas, meal, or rice. Upon this place, as well as many others, the people can get as many oysters, crabs, and fish as they like. They also keep a great many more hogs than their masters, but generally sell the pork instead of eating it. A half bushel of sweet potatoes, as measured out for allowance, by repeated weighing, averaged 43 lbs.

The process of preparing Sea-Island cotton for market after it is grown, is so remarkable, and so little known, that I will give the particulars.

In gathering it from the field, great care is taken to keep it clean and free from trash and stained locks. Upon the drying scaffold it is sorted over before packing away in the cotton house. When ginning, in fair weather, it is again spread upon the scaffold, and assorted. Some run it through a machine called a "trasher," that whips it up and takes out sand and loose dirt. It then goes to the gins, which are the same kind first invented; none of the many new inventions have been found efficient, and the Whitney gin totally unfit for Sea-Island cotton. These simple machines are 3½ feet high, 2 feet long, and 1 wide, with an iron fly wheel like that of a "box cornsheller." upon each side, working a pair of wooden rollers, made of hard oak, about ten inches long and nearly an inch in diameter, held together by screws. In one instance, I saw a simple spring bearer under the lower roller and an iron one on top, to prevent the cotton from winding. These rollers wear out, and have to be replaced by new ones every day. I would recommend gutta-percha, as worthy a trial, as a substitute for wood, as something tough and hard is required. The rollers are moved by the foot, like a small turning lathe, the operator standing at one end of the gin, feeding the cotton very slowly through the rollers, leaving the smooth black seeds behind. A "task" is from 20 to 30 lbs. a-day, according to quality. Twenty or thirty of these little machines stand in one room; and strange to say, none of those who have attempted to propel them by other power have succeeded.

One very intelligent gentleman told me that he had spent \$5,000 in trying experiments in machinery to gin this kind of cotton.

From the gins, the cotton is taken to the mote table, where a woman looks it over very carefully and picks out every little mote or stained lock, as fast as two men gin. From the mote table it goes through the hands of a general superintendent, or overlooker, and then to the packer. This operation is done by sewing the end of a bag over a hoop, and suspending it through a hole in the floor, and in this, the packer stands with a wooden or iron pestle, packing one bale of about 350 lbs. a-day, as fast as it is ginned; as exposure to the air injures the quality, and it is not so salable in square bales packed in presses, as it is in hand-packed bags.

The whole operation of preparing this valuable staple for market requires the nicest work and careful watching of the operatives, as a little carelessness injures the value to the consumer. It is worth from 30 to 50 cents a pound —more than common wool.

The cultivation of these plantations is exceeding neat—too much so, probably, for the greatest profit, as has been proved, I think, by Mr. Townsend, in the use of plows instead of hoes. Mr. T. has also proved that sugar cane will grow well, and has put up a small mill, and made some sugar. The cane matures fifteen joints and granulates well.

# HOW MUCH LIME WILL AN ACRE OF LAND BEAR WITHOUT INJURY?

[New York American Agriculturist, 9:207; July, 1850]

[June ?, 1850]

THIS is a question often asked and as often answered in various ways. Some persons contend that no more than fifty bushels of slacked lime should ever be used at once, while others are of the opinion that it is better to put on 100 bushels at first than to make two or three jobs of it; and that there is no danger of an over-dose; while, on the other hand, it is alledged that too much will kill the land. Now, how much is "too much?" This depends much upon the nature of the soil.

The largest amount within my knowledge, was applied by James P. Corbin, Esq., of Caroline county, Virginia, upon cold, clayey land, known in that region as "pewtery land," because, when wet, it seems to run together somewhat like melted pewter, with a glistening surface. Upon two acres, he put 1,600 bushels, and plowed deep, drained well, and planted in corn, and made a good crop. It was then sowed in wheat, and when I saw it in April, it looked far better than any upon adjoining land, and about two thirds as good as that upon which guano was applied—one costing \$64 and the other \$5 an acre. I cannot advise others to follow suit, though the experiment, so far, has proved that some land cannot be "killed with lime." S.

EASY METHOD OF DRAWING WATER FROM A DEEP WELL. [New York American Agriculturist, 9:207; July, 1850]

[June, 1850]

ONE of the best pieces of mechanism that I have seen for this purpose, was applied to a well 80 feet deep, by W. P. Carmichael, at his mother's, Mrs. C's. residence on the Sand Hills, near Augusta, Georgia. It is upon the same plan as the simple hoisting apparatus of a store; or that described at p. 177 of the current volume; that is, an endless rope, to which two buckets are attached, passing over a wheel, about six feet in diameter, which turns the barrel upon which the rope is wound. A hinged lid, on top of the well curb, directly over each bucket, is thrown back as the bucket comes up, and as soon as clear, falls, and the bucket is eased back and stands upon it till wanted again.

A boy a dozen years old can draw water with this

<sup>&#</sup>x27;James P. Corbin, first vice-president of the Rappahannock River Agricultural and Mechanical Society. The Plough, the Loom, and the Anvil, 6:482 (February, 1854).

apparatus without fatigue. A pipe leads from a tub by the side of the well to the stable, about 150 yards off, thus affording a convenient watering place for the stock.

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#### A VIRGINIA HOUSEWIFE.

[New York American Agriculturist, 9:227; July, 1850]

[June ?, 1850]

Some of our northern readers suppose that all at the south, entitled to the rank of *ladies*, never take upon themselves household cares; that is, none of them are housewives, in the sense which they are quaintly described in Tusser. A housewife

"Who seemeth in labor to equal the pains
Of husband who striveth to bring in the gains."
and again:

"Though in field good husband it is needful should be, Good housewife within is as useful as he."

Just such a one, at least, is one of my Virginia acquaintances. She is a lady in every acceptation of the word wife of a wealthy gentleman who resides in one of those elegant mansions upon the banks of James River, upon one of the six first-settled estates in the ancient colony of Virginia. Notwithstanding she has numerous servants to do her bidding, yet no matron of a New-England farmhouse is more of a housewife than this lady.

On a recent visit to this most lovely and interesting family, I found the lady in her kitchen, personally super-intending the operation of putting up the lard of fifty porkers, for family use—a duty as she assured me, which she had not failed to attend to but once while she had been mistress of that house, and in all the time, never had failed to have sweet lard at all seasons, the great secret of which lies in personal superintendance, to know that it is cleanly rendered and well cooked, and put up, not too hot, in sweet tubs, (oak is the best wood,) or good stone jars, and these put away in a cool place. True, the time has not been a very long one, for she is

yet a young, as well as a very handsome housewife; but she has been the mother of *nineteen children*, thirteen of whom are living, and every morning "rise up and call her blessed." Need I add that the children are an honor to such a mother, or that her noble husband "knoweth and esteemeth his treasure," as a good wife always is a treasure to him who deserveth her?

"Now out of this matter this lesson I add,
Where ten wives are better, ten more are more
sad."

And this is not a solitary instance, but a fair sample of the way in which the highly-educated, polished ladies of southern planters "Looketh after the ways of their own household." The exceptions are among those who have been spoiled, (not educated,) in fashionable boarding schools.

SOLON.

Mr. Robinson's Tour.—No. 20.

[New York American Agriculturist, 9:255-56; Aug., 1850]

[June ?, 1850]

Benefits of Railroads to Agriculture.—Having given an article upon this subject, as illustrated by the New-York and Erie Railroad, I now propose to give another of similar character upon the South-Carolina Railroad, which connects the city of Charleston by three branches to one stem, with Camden, Columbia, and Hamburg, and thence to Augusta, Georgia, and all the Georgia railroads.

I left Charleston upon my tour of examination on the 14th. of Feburary, which some of my readers at the north will perhaps remember as a severe cold day, while here it was mild and pleasant and free from snow, which never incommodes this road as it does some of those at the north. It is but an act of justice for me to say that I had been provided with a "free pass" by the president of the company, Colonel Gadsden,<sup>2</sup> which I understood

<sup>&</sup>lt;sup>1</sup> Printed ante, 314 ff.

<sup>&</sup>lt;sup>2</sup> James Gadsden, railroad president, promoter of Southern nationalism, minister to Mexico, Born May 15, 1788, at Charleston;

had been ordered by a vote of directors, in consequence of my connection with the American Agriculturist. I have some reason to believe that I owe this to my respected friend Colonel Wade Hampton. I certainly look upon it as a compliment to my labors in the cause of agricultural improvement, and a mark of high respect to the agricultural press.

Now, kind reader, if you please, let us journey together. We leave the Charleston Hotel, (one of the best in the Union,) in a large omnibus, which is worthy of notce and commendation, at nine o'clock, and drive about a mile to the depôt, principally along a plank road, recently laid down in King street, and though not quite equal to a "Russ pavement in the goodly city of New York," it is far better than the deep sands of Charleston. The neatness and order of the depôt is somewhat in contrast with that of Boston and other places; but the cars are pretty fair, and it is worthy of remark, that the conductors of all the passenger trains I was upon, (and I believe it comprises nearly the whole.) are among the most gentlemanly, well-bred, kind and accommodating officers of my acquaintance. At ten, we are under way; the Hamburg train a head and the Columbia train following within half amile, so that both are at Branchville at the same time. Along the first five or miles, we see a succession of vegetable gardens, but, few or no farm houses, for the reason that no white person can live out of the smoke of the city fires, during summer, on account of the extreme unhealthiness of the country.

The road now passes through an almost unbroken forest of flat, sandy, wet land, of pines and scrubby cypress, 62 miles to Branchville, where the Hamburg and Columbia trains part company. Thence to Hamburg is 74

died December 26, 1858. Served in the War of 1812. Became a colonel in 1820. President of Louisville, Cincinnati, and Charleston Railroad, 1840-1850. Interested in a southern railway to the Pacific and, as minister to Mexico, negotiated for the purchase of land for the route. See sketch in *Dictionary of American Biography*, 7:83-84.

miles and to Columbia 68 miles, with another branch, taking off 25 miles below Columbia, and 105 from Charleston, and running up to Camden, 37 miles, or in all, 142, the three branches making a total of 241 miles. From Columbia, there are two roads building, which will soon be in operation and produce a wonderful effect upon the agricultural industry of North and South Carolina.

One of these roads is to extend 109 miles to Charlotte, N. C., through a rich farming country, far from navigable water, and the other one to Greenville, S. C., with its branches, will be 160 miles long, mostly through a rich cotton and corn country, and lately found to be very productive in wheat, and only wanting market facilities to make it a very productive and healthy farming region.

From the end of the Hamburg branch, the Georgia Railroad to Atlanta, 171 miles, and the Atlantic and Western Railroad, 138 miles to Chatanoogee, making 445 miles from Charleston, in a direct line towards Nashville, Ten., are now in successful operation, and have already benefitted the rich agricultural region through which they pass more than the whole road has cost. From Branchville to Aikin, 56 miles, the quality of the soil and appearance of the country somewhat improves, and is more settled, though but sparsely. The traveller is constantly impressed with the idea that he is passing through the wild forests of some new country, instead of along one of the oldest railroads in the United States, and through one of the oldest states. From Charleston to Aikin. 118 miles, the road has one gradual rise, and is there 513 feet above tide water. Here we descend 176 feet down an inclined plane, 2,640 feet long, towards Hamburg, and down 197 feet more through 18 miles to that place, which is 140 feet above tide. Six miles from Aikin, we pass the neat little granite imitation gothic depôt of Granitsville, one of the most beautiful and flourishing manufacturing villages in the Union; which probably never would have been in existence if the railroad had not been previously built. This place is well worthy

of a visit from every intelligent traveller, and offers strong evidence of the benefits of railroads to agriculture; for, where facilities of transportation are most convenient and cheap, unless the soil is unforbidding, it will be improved, and where manufactories are located and flourishing, there will agriculture be found most improving.

The trip from Charleston to Hamburg, 136 miles, is 8½ hours, and price of passage, \$5. This road was chartered in 1828, and in 1830 the first locomotive was put in operation. This was about the first application of steam upon railroads in the United States. In 1833, the road was opened to Hamburg, and was then the longest road in the world. This was the first railroad in the United States upon which the mail was transported.

The Columbia branch was commenced in 1838 and finished in 1842, and the Camden branch some years later. The following figures will show the increasing usefulness of the road:—

In 1834, the number of bales of cotton transported, was 24,567; in 1835, 34,760; 1836, 28,497; 1837, 34,395; 1838, 35,346; 1839, 52,585; 1840, 58,496; 1841, 54,064; 1842, 92,336; 1843, 128,047; 1844, 186,638; 1845, 197,657; 1846, 186,271; 1847, 134,302; 1848, 274,364; 1849, 339,996—showing an increase, in sixteen years, in this one article, of 315,429 bales over the number transported the first year. What a vast number of horses and men, the carriage of the last year, alone, would have withdrawn from cultivation, to transport all these bales in wagons! The proportionate increase in some other things has been equally great.

In consequence of the facilities of getting turpentine to market, which formerly would not pay transportation by wagons, a few individuals began to levy contributions upon some of the valuless pine forests, and in 1846, the railroads brought down 48 barrels; in 1847, 3,189 bbls; in 1848, 5,753 bbls; in 1849, 13,918 bbls.

In 1849, 66,904 bushels of corn were carried, and

1,507 bbls. flour, though most of that was carried into instead of out of the country. But in the same year, 1,584 head of cattle, mostly beef, and 3,353 hogs, mostly fat, and 328 sheep, and 977 horses were carried; and 16,632 bales of domestic cotton goods were brought down from the interior factories; not one of which would have reached the sea shore, if this railroad had never been built.

The increase of amount received for freight has been upon the same scale. In 1834, the receipts for all freight was \$83,214.44; in 1844, \$306,155.71; in 1849, \$621,990.32; in 1834, the number of passengers was 26,649, giving \$79,050.35; in 1849, the number was 92,713, and amount, \$223,325.42. The rate of charge for passage is four cents a mile for all distances under 125 miles, and five dollars for all longer distances.

These rates, so much higher than northern roads, are contended for, because, unlike those roads, this could gain no *way* passengers by lower fare, for the very good reason that they are not there to gain.

The rates of freight upon the lightest class goods, are eight cents per cubic foot; and upon boxes, bales, &c., 45 cents per 100 lbs. Upon coffee, sugar, pork, lard, and heavy articles, 25 cents per 100 lbs.

Upon all grain and seeds, (except oats,) in sacks, seven cents per bushel. Oats, five cents. Upon shovels, spades, scythes, brooms, &c., 25 cents per dozen.

Upon plows, wheelbarrows, cornshellers and straw cutters, 50 cents each.

Upon the very things, particularly plows, that should be carried almost freight free, the heaviest duty is levied. Upon a plow that costs only \$1.37½, at your store, in New York, and a sea freight of only 12½ cents, the farmer must pay one third of its whole cost to get it a few miles up the railroad. I call the attention of directors of this, and also other roads, to the policy of encouraging the farmers to use improved implements and fertilisers to increase their products, by offering to transport them

at more nominal freights, and thereby ultimately increasing their own business profits, and greatly benefiting agriculture.

The freight charged for carrying a single horse or ox, is \$8. For two, \$12, for four, \$20, for ten, \$30, for twenty, \$50.

The road is well furnished with cars and engines, and the Columbia and Camden branches laid with T rails, of 35 to 56 lbs. per yard and the other part is being relaid with the same kind of rails, 51 lbs. per yard, so that the country has the prospect of a good road, and if the directors will give them cheap freights, the benefits to agriculture incalculably will be great.

It is proper that I should remark that I am indebted to William H. Bartless, Esq., one of the polite gentlemanly officers of the company, most of the statistical information herein given.

I also had the pleasure and advantage of the company of the Hon. H. W. Conner,¹ president of the company, upon a passage from Hamburg round to Columbia, and through his politeness learned much of the history of the road. The inclined plane has been a very expensive affair; it is now operated by a descending locomotive attached to one end of a wire cable, the other end being fast to the ascending train, and the middle working over a drum at the top of the hill. This plane could be avoided without difficulty.

There are no rock excavations, deep cuts, nor high embankments, of any magnitude on the whole road; though there is some pretty long bridging across the Congaree River and Swamp. One of the most striking things no-

¹ Henry William Connor, born near Amelia Courthouse, Prince George County, Virginia, August 5, 1793. Major in Creek Indian War, 1814. Settled at Fallstown, Iredell County, North Carolina, and engaged in planting. Served in Congress, 1821-1841. Member of state senate, 1848-1850. One of the directors of a company formed to experiment with lighting the city of Charleston with gas, 1849. De Bow's Review, 7:346 (October, 1849); Biographical Directory of the American Congress, 841.

ticed by a northern traveller, upon all southern railroads, is the difference in the appearance of the depôts and more particularly the way stations. However, it is only the natural difference between a white man and a negro. The difference between neatness and thriftiness, filth and dilapidation. It is a question of some importance in an agricultural point of view, what will be done or, if anything can be done, to reclaim all the waste lands that we see along this road, lying idle and unproductive, and in a great degree uninhabited and uninhabitable, on account of its malarious character.

In coming up from Charleston to Akin, we see nothing that looks like a hill; and upon the Columbia branch, none till near the Congaree, and only small patches of clearing, and but two or three unimportant towns. The mass of the land, in the lower part of the state, is in the forrest, some of it thin sandy upland and some rich swamp that, if once drained, would be very productive in cotton, corn, potatoes, or rice.

The greatest drawback to improvement is the disposition of many persons to buy up all the land that joins them; as for example, my friend Major Felder,¹ of Orangeburg, who boasts of owning fifty thousand acres. For what purpose he desires to accumulate such a vast tract of unproductive land, is past my comprehension—certainly not for his children—and I don't believe he will live long enough to saw up all the timber in his half dozen sawmills. Besides the unhealthiness, however, of a large portion of those lands, between Charleston and Akin, there is another thing to prevent their settlement and improvement by individuals. The country is so flat that it requires some great and general plan of draining, to free it from the surface water, in the first place, and this will not be undertaken so long as labor can be more

<sup>&</sup>lt;sup>1</sup> Probably John Myers Felder, born Orangeburg District, South Carolina, July 7, 1782; died September 1, 1851. Major of militia in War of 1812. State legislator and Congressman. Engaged in agricultural pursuits and in the lumber business. Biographical Directory of the American Congress, 960.

profitably employed upon soils naturally more dry and rich. The fact is, there is entirely too much land in the United States for the present population.

# WHEAT VERSUS CATTLE; WHICH IS THE MOST PROFITABLE FOR THE WESTERN FARMER?

[Chicago Prairie Farmer, 10:278-79; Sep., 1850]

[July 17, 1850]

MESSRS. EDITORS: I have been so much absent for two years that I may not be competent to answer this question. A long time ago I had the pleasure of communicating with your readers. Of late my connections with the American Agriculturist has demanded all my time. On my return home finding another failure in the wheat in this county, I am induced to call attention to this subject once more. Is wheat-growing profitable? or rather, is it as profitable as stock raising might be made in such a grass country as ours? Can you compete with Maryland and Virginia in wheat, any better than they can compete with you in cattle and good beef. I speak of the tide water region where transportation is so easy. True the crop sometimes fails there. It is badly injured by rust this year.—But the cattle look rusty every year. Not so here. The wheat crop will be short there. In Western New York, about a Fair average. In Ohio, much injured by drouth; last year it was ruined by the rust. In Michigan, this year it will turn out better than farmers expected during the Spring. Corn I noticed, as I passed through, looks very rank and growing, though generally small.

In this great wheat growing region of Northern Indiana the winter wheat is as handsome as could be desired; but unfortunately there is but little growing. It has heretofore been so much killed with flies, drouth, Winter freezing, or Spring thawing, or want of snow, or too much snow, or, if escaping all these, the rust; that farmers have

been discouraged from sowing in the Fall and turned their attention more to Spring wheat. This has occasionally been injured by the chinch bug heretofore. Owing to the great drouth this year it was late in coming forward. and in this county, now, there are more bugs than wheat. Fields just in bloom look like ripened grain, and the smell of decaying straw, or dying bugs, is strong enough to knock down an elephant. This will affect the health.— They are now attacking the oats and corn. The uncommon strength and rank growth of the latter will prevent any serious injury; but the loss of wheat will be felt severely. This constant failure should induce the people of all this great grass growing region of country, after battling fifteen years with all the ills of life that wheat is heir to, to sit down and count the cost, in days of harvest toil, of all the bushels of wheat ever grown upon these noted "wheat lands of the West." Has the husbandman been paid for his labor, or does he chew the cud of bitter disappointment? He certainly has had to chew many a hard crust of bitter bread from shrunken wheat, and vet he has faith more than equal to a grain of mustard seed, for he still casts his wheat upon the waters trusting it will come after many days.

Now, my friends, is it not time for you to begin to think that wheat is not the most natural and profitable staple crop of this part of Uncle Sam's big pasture? Does any land in the world produce better beef than the prairies of Indiana, Illinois, Wisconsin and Iowa? Grass, either wild or cultivated, is ever growing luxuriantly upon an inexhaustible soil. Indian corn, the best crop in the world for making beef, rarely, if ever fails. If your winters are longer than in Virginia, yet you can winter stock cheaper than there; because, here grass grows freely and there only by the hardest exertion of cultivation. Your cattle are already far superior to theirs, yet how much might they be improved.

I wish I could exhibit to you a herd now advertised in

this paper for sale upon the farm of Mr. Sheafe,¹ on the Hudson River below Poughkeepsie, to prove to you this fact, and show you what mountains of beef might be made to move about upon our rich prairie lands, if a portion of this herd might be brought here to infuse some of their good qualities into the common cattle of the country. I do honestly believe that if that bull "Exeter" was presented to the State, it would be of more value to the people than a present of ten thousand dollars in cash.

It is true that some spirited individuals have heretofore introduced some valuable cattle, and have failed to
realize a fair compensation for their expense and trouble,
but that was when every man had a grain of wheat in
his eye, so he could see nothing but great profits from
great crops, except when he saw great disappointments
from great failures. But would it be so now? And after
so many failures to your rich, growing wheat, is it not
worth while to grow wise, and make the attempt to make
some of the down-easters think we can grow as good a
herd of Durham cattle upon the Western prairies as can
be grown upon the weekly pastures along the Hudson
River?

To do this we must have the stock to start with. If I had not already made arrangements to be absent from the country the next year, I should be willing to join any gentleman who felt disposed to try the experiment fully of growing good cattle in the West for an Eastern market, which I am well satisfied may be done more profitably than growing wheat for the same market. If any of your readers are of the same opinion, I have only to say that the sale of Mr. Sheafe's cattle will afford a better opportunity to obtain animals of pure blood and excellent quality

<sup>&</sup>lt;sup>1</sup>J. F. Sheafe, a prominent cattle breeder. Specialized in Shorthorns. His stock was frequently mentioned in the American Agriculturist, 1850-1851. He was a life member of the New York State Agricultural Society. New York State Agricultural Society. New York State Agricultural Society Transactions, 1854, vol. 14:xvii. See also The Plough, the Loom, and the Anvil, 3:179 (September, 1850); American Farmer, 4th series, 6:48 (August, 1850).

at fair prices, than is often met with, as the owner is a gentleman of wealth now on a tour in Europe and has instructed Mr. Allen to sell the whole herd without reserve. That it is a very superior one I am willing to certify, if that is of value to anybody desiring to purchase. I beg pardon for spinning so long a yarn out of so little material.

Solon Robinson.

Crown Point Lake Co., Ia., July 17, 1850.

## A SPECIMEN OF AGRICULTURAL KNOWLEDGE—ARE CORN COBS GOOD MANURE?

[New York American Agriculturist, 9:250; Aug., 1850]

[July ?, 1850]

THIS question was lately put to me by a gentleman at Jackson, North Carolina. I answered yes, of course; that I considered them highly valuable, &c. To this, another man put in an objection. He cautioned the first person not to use them too freely. If he did, he would not make any corn; "because," said he, "I tried them last season, and where I put them on thickest, I lost all my corn."

"Ah! how do you account for that?" said I.

"Oh! easy enough. There is so much lime in cobs, it burnt up the land so that the growing corn all died."

"So much lime in cobs!" I exclaimed; "Well, that is new to me. Are you sure that was the cause?"

"Oh, yes; certainly. What else could it be? I don't believe much in lime, no how."

"Perhaps you did not plow your cobs in deep enough. What kind of land was it?"

"Well, it was good strong clay land, and they were plowed as deep as we ever plow in this country. How deep would you have plowed?"

"Ten or twelve inches?"

"Ten or twelve inches! Well, I don't want you to plow my land. You'd turn the soil all under so deep it never would do any good again."

My dear Sir, I would not only plow that deep, but I

would use the subsoil plow, also, and then I don't think that the *lime in corn cobs* would hurt your land."

"You may talk as much as you like, but I know it was the lime in the cobs that killed my corn; and lime will kill any land in this climate; and as for a subsoil plow, I wouldn't let you bring one on my farm; and I don't believe they were ever of any benefit to land in the world."

"What sort of plows do you use, my friend, and how much team to a plow?"

"Why, the common sort of plows in this country; and I never want any plows on my land that one horse can't pull. I've seen enough of your new-fangled Yankee plows—I b'leive they're just poison to the land, I do; and as for plaster and guano, that you talk so much about, I've tried both and they a'n't worth a cent; no, nor lime either."

Now, I pray you to take notice that this wise man is not only a farmer, but he is an overseer—one who hires for high wages-lets himself and his knowledge and skill to another; sets himself up as a competent teacher of the right mode of farming, manuring, and managing land; and, as you see, understands "agricultural chemistry," about upon a par with nine tenths of his class; and vet this man has charge of an estate that is probably worth seventy or eighty thousand dollars. How can a country improve when nearly all the agricultural operations are conducted by just such bigoted ignoramuses as this man —men that ridicule the idea of learning about farming in a book. And not only that, but when such men as the Messrs. Burgwyn's are conducting their enlightened operations right before their eyes, and, by means of lime, turning old broom-sedge fields into the most luxuriant clover pastures, they not only ridicule them because the first "crops don't pay cost," but contend that lime and deep plowing will ruin any land. How can you teach a man agricultural science, that contends that "lime in corn cobs" killed his corn, and who never reads an agri-S. R. cultural book or paper?

Mr. Robinson's Tour.—No. 21.

[New York American Agriculturist, 9:289-90; Sep., 1850]

[July ?, 1850]

Virginia Fencing.—This term is generally understood to mean a crooked or worm fence, of split rails. But in some parts of the state, that kind of fence is least common. I noticed in Gloucester county a very good kind that may well be imitated elsewhere. It is made with alternate long and short pannels, of lengths of five and ten feet, six and twelve feet, and three and ten or twelve. I like the last best. It makes a fence so near straight that it takes up but little room, which is a consideration too much lost sight of in good lands.

This fence may be staked and ridered, or staked and capped, if necessary. It is most commonly built upon a bank, as, in fact, are nearly all the fences upon the "low lands" in that and adjoining counties and in the Rappahannock Valley, upon the west side of the river, particularly. This ditching and banking for fence may be very well upon wet lands, but it is often carried to extremes. I have often seen it six or eight feet, and even higher, with sometimes no rails on top, and then it is no fence. Sometimes three or four rails, and then it is about half a fence, and sometimes eight or ten rails, and then it is a good fence; and so it would be if there were no ditch and bank. Where cedar grows, instead of rails, brush is often used, wattled together between stakes and makes a good, durable fence. It will last, with slight repairs, 20 years, if the stakes are of cedar or chestnut, both of which abound in Lower Virginia.

Another kind of wattle fence is made of poles, the stakes being set eight or ten feet apart. There are a few hedges made chiefly of cedar, and is generally a pretty good fence against cattle, except where the trees die, as is often the case, but no barrier against hogs, which filthy brutes are still permitted to run in the roads, notwithstanding the great advancement mankind have made in civilisation.

At Hazlewood estate, in Caroline county, the late residence of Colonel John Taylor,¹ the oldest agricultural writer in America, which is now occupied by his heir and namesake, there are miles of cedar hedges, for which the Philadelphia Agricultural Society gave him a gold medal in 1819. It is said that it was then a beautiful and good fence. But, like all tree-growing plants used for hedging, it has overgrown itself. It has been found impossible to keep it trimmed down, and as it increases in height, as a matter of course, nature prunes the lower limbs. The great error, however, in planting this hedge, was, setting it upon a high bank, which has made it more difficult to trim, and keep in order.

There is another farm six miles below Fredricksburg, on the opposite side of the Rappahannock, upon both sides of the road, which looks beautiful at a little distance, but as you approach, you find it full of unsightly gaps and dead trees. Like that at Hazlewood, it was planted upon a bank, and was not trimmed down enough when young. There are a good many other cedar hedges in the state that I have noticed in my travels, none of which are fences.

An excellent fence very common in Virginia, is made in this manner: A pair of stout cedar, chestnut or locust stakes are set strong, just wide enough apart to admit a large rail between, having a two-inch round tenon upon the top of each, to receive a strong cap, upon which a heavy rail is sometimes laid after the space below is filled up with rails, lapping one upon another, between the stakes. This kind of fence is most commonly built on a ditch bank. In fact, it seems in some districts as though the people have no idea of ever building a fence

¹John Taylor of Caroline, planter, lawyer, United States Senator. Born in Virginia, 1753; died at his estate in Caroline County, August 21, 1824. Served in the Revolution. Political and agricultural writer. First president of the Virginia Agricultural Society, 1811. Author of Arator (1813), a series of agricultural essays. Disciple of agrarian liberalism. See sketch in Dictionary of American Biography, 18:331-33; Tyler (ed.), Encyclopedia of Virginia Biography, 2:88.

except they first dig a ditch, whether the land is wet or dry. The best style of fence upon these banks would be palisades, which might be made as follows:-Cut the stuff four feet long, of lasting wood, and split it the size of rails, and sharpen the upper ends; set these in the line of the centre of the bank, and throw the dirt around This is done by one hand to put them, one at a time, in place and hold them, while another throws dirt enough around to secure them. They should stand about four inches apart, and project above the top of the bank about two and a half feet. No animal will ever climb over such a fence from the bottom of a ditch, nor vice versâ. The fence will be better, if a strip of board is nailed along the face of the stakes, about four inches from the top as that prevents any one piece being removed out of place. Perhaps a wire stretched along and nailed to each stake, would be cheaper than wood strips. This kind of fence will be found to be a very cheap and good one, wherever the owner has, or will dig a ditch. It takes less timber than a rail fence, and will last as long with less repairs. I would recommend gentlemen who are troubled with cattle pushing through hedges, to stretch a wire along through the limbs, or perhaps two of them. Generally speaking, the Virginia fences are very good, and in such abundance that they are a most enormous tax upon industry. SOLON ROBINSON.

#### SKETCHES OF CANADA.

[New York American Agriculturist, 9:307-9; Oct., 1850]

[August 19, 1850]

ON the 13th of August, I left Buffalo for a flying visit into that terra incognita to many of your readers, now known as "Canada West," a designation that, like many other improvements, does not improve greatly upon the ancient and well-known name of Upper Canada. But we won't quarrel about names until after "annexation," and then we will call it "the State of Ontario."

In leaving Buffalo, we take the cars for Niagara Falls, twenty-two miles over a cold, flat, clay soil, originally, and still, in part, covered mostly with oak, beech, and maple, and other kindred timber, and little of it cultivated in a manner to begin to show its capability of producing small grains and grass. I noticed farmers along the road busy cutting oats; and occasional spots were white and fragrant with the bloom of buckwheat. Corn, to one from a southern corn region, looked very diminutive, though of a rank-green hue, and now just in blossom. Orchards few, trees scrubby, fruit small, as a general thing. The railroad and cars upon this route are good; fare, 75 cents, time, 1¼ hours.

The Falls Village is a place capable of affording a great and cheap water power; and if half the energy were displayed in turning it to some account, that is devoted to plucking the gulls that annually flock there, it would soon become a great manufacturing town, furnishing employment to thousands of laborers, and adding value to all the farming land in the vicinity.

From the Buffalo road, passengers for Lewiston and Canada step into the cars of the Lockport road, which stands ready in the open street, where all are disembarked, instead of a commodious depôt under shelter, as is the fashion in some Christian countries. The road now runs just along the very edge of the frightful precipitous bank, and the boiling flood that rolls between the perpendicular walls of that immense chasm below the Falls. We begin to bear off from the stream at the Suspension Bridge, a structure that looks like a frail ribbon stretched from bank to bank, but yet is capable of carrying over heavy teams, elevated more than two hundred feet above the river, which seems here to be struggling to force its way through a gorge too narrow to admit the mass of water that pours down the great fall, three miles above. At the Junction, three and a half miles from Lewiston, we exchange from the wretched cars of the Lockport road, to others not much worse, drawn by

horses down the long hill, to the steamboat landing on the Niagara. A most charming agricultural scene opens to view, while descending this hill. The farms upon the great Lewiston plain of alluvial lands, are spread out as it were, like a picture at our feet. Good farm houses, barns, orchards, stubble, and oat fields of golden hue, contrasting with the dark green of maize and grass, and all interspersed with groves of forest trees, and flanked by the village and river, and opposite shore, and town, and heights of Queenston, form a whole that is delightful, and never fails to gratify the eye of every traveller who has a taste for rural scenes.

The time required to make this trip upon these railroads from Buffalo, is upwards of three hours—a little over ten miles an hour—which is rather slow railroad travelling, but decidedly better than staging over the same route thirty years ago.

The steamboat for Hamilton, left the Lewiston wharf at one, crossed over and touched at Queenston, and then down the river, stopping at Youngstown, on the Yankee side, and Niagara opposite, where the decaying wharves and warehouses bear witness that the spirit of enterprise and improvement, which animates the people of one side of this river, does not, for some unknown cause, affect the other side in the same way.

Directly after leaving these towns, we pass between the British and American monuments of wickedness and folly that disfigure the mouth of this beautiful river, bearing bristling cannon pointed at each other, where nothing but emblems of peace and productiveness of a rich soil and healthy clime should, of right, ever be seen to divide brethren from the same hearth stone, into two belligerent nations. A few miles after entering Lake Ontario, and turning north along the west shore, we run along side of the piers of the mouth of the Welland Canal, a work of monumental form to the mind that can conceive the project of lifting fleets out of Lake Ontario and sending them over the mountains, into the upper lakes, and

in return loading them with the produce of western farms, and sending them direct to Europe.

The farmer, while tilling his crops in Wisconsin or Illinois, thinks but little that this canal exerts a direct influence in his favor, and tends to enhance the value of every bushel of grain he produces for sale. Yet, such is the fact, and such will ever be the fact with every canal, and railroad, plank road, or improved facility of getting produce from the place of growth, toward the place of consumption. Yet farmers, almost everywhere, are reluctant or dilatory to lend assistance towards any such improvement, or even to keep neighborhood or market town roads in decent repair.

We were about five hours making this forty-mile trip from Lewiston to Hamilton, against a head wind and a very sickish sea. The town lies a mile back from the shore at the head of Burlington Bay, which is entered by a short canal through the neck of land that divides it from the lake. It is said to contain 10,000 inhabitants, has some broad, handsome streets, and substantial stone and brick buildings, and like all new towns, shows some marks of its early Jonah-gourd-like growth. It is located upon a handsome inclined plane, which extends from the water to the base of the mountain range that skirts the lake a mile or two from the shore, which renders many of the farms, though picturesque in appearance, very much broken. I understand a narrow strip of these farms produce peaches, while others totally fail. land between the mountain and shore appears to be a sandy loam—that upon the sides and on the table land. which spreads out into a broad extent on top of the mountain, is a stiff, brown clay, and one of the best soils for wheat in North America. Owing to continued indisposition, while I remained at Hamilton, I was unable to visit many of the neighboring farms.

The agricultural capabilities of the district around Hamilton, and on westward towards London and upon Grand River, are probably equal to any tract of the same extent upon this continent; and I believe there are some very good farmers; but there is, upon the whole, a very great lack of that enterprising spirit which alone can bring a rich soil into a high state of culture and productiveness.

On Thursday afternoon, August 15th, I left Hamilton, and reached Toronto in four hours, run close along the north shore of the lake, where a good many flourishing farms are to be seen, if we may judge by what I have always considered a good sign, that is, good barns.

Toronto is also situated up a bay, though not back from the shore like Hamilton. One of the most prominent objects in approaching this city is the Lunatic Asylum, and next the extensive, commons lying waste in front of it, though not quite so worthless to the world as the barracks and their occupants, also seen in the same view. What a number of persons might support themselves by cultivating this tract of rich, alluvial land now lying idle, or only serving to show off the trappings of the few swords not yet made into pruning hooks and plow shares. I was disappointed in finding Toronto so much more of a lively, thriving business place than I expected. The population is about 27,000, which, I presume, includes somewhat extensive suburbs. One of the best farming regions of the province lies contiguous, and gives trade and wealth to this city.

By the politeness of Mr. McDougal,¹ editor and proprietor of the Canadian Agriculturist and the North American, I had an opportunity of viewing the farms some ten miles out "Yonge street." This name is given the continuation of the principal street leading north, in

'William McDougall, born in York (Toronto), Upper Canada, January 25, 1822; died at Ottawa, May 29, 1905. Attorney and solicitor. Member of Canadian parliament. Commissioner of crown lands, 1862-1864. Minister of public works, 1867-1869. Founded the North American, 1850. Keenly interested in agriculture. Exhibited Shetland ponies at the Ohio State Cattle Show, 1850. American Agriculturist, 9:375 (December, 1850); Wallace, W. Stewart (comp.), Dictionary of Canadian Biography, 254 (Toronto, 1926).



Solon Robinson, 1854



the direction of Lake Simcoe, which is about 37 miles dis-It has been graded and Macadamised upon a straight line, without regard to any obstacles, as creeks or ravines that might intervene, and like a great many similar foolish efforts to make a road straight, going through and over hills, instead of going around them, it has caused a great outlay of money in places where a slight bend would have saved the largest portion. It is a government work, and is kept in repair by tolls. farms are laid out one fourth of a mile wide and one and a fourth deep; then comes another road, and so on. These strips are called "concessions," and are numbered according to situation. Cross roads, also, run a mile and a fourth apart; so the whole country is divided into squares of a mile and a quarter. This is an old French fashion, adopted, at first, along the streams for the purpose of giving a greater number of frontings upon the water. In the interior, it certainly is not so perfect a system as the United States have, of mile-square sections and square subdivisions, all numbered by a systematic rule.

Leaving Toronto, we ascend very gradually from the lake, a couple of miles, and then up a low ridge corresponding with the curve of the shore, composed of sand. gravel, and clay, like the present beach. All the soil below the ridge is more spongy than above, though much more sandy. The upper level is a rich clay loam, without hills, though broken by ravines. Portions of it were covered with white pine, and other parts, with hard wood. This was made up of maple, beech, elm, ash, hickory, basswood, butternut, and some other sorts; oaks not being plenty. Farms of 200 acres, with a good comfortable brick house and out buildings, and good barn, and well fenced, and under fair cultivation, averaging 25 bushels of wheat, and 35 or 40 bushels of oats, and 200 of potatoes, will sell for about \$50 an acre, along this road. within ten to twenty miles of the city. Corn is only grown for home consumption, and does not probably average much more to the acre, than wheat. The soil here is excellent for grass, but the winters occupy half the year, and are sometimes very severe. I did not see so many cattle as I expected, though I did see a few herds of good-looking cows, and some small flocks of fine sheep. As for horses, I venture the assertion that I can count a greater proportion of good substantial, real serviceable farm horses upon this road than upon any other that I have ever travelled.

I observed here the same scarcity of good orchards, that I have elsewhere. There are a few rather tasty and somewhat ornamental places, but the great portion of them show the owners to be very plain, and probably, comfortable-living farmers, that have not yet heard of "agricultural chemistry," nor "scientific agriculture." Almost all we see, reminds us of Auld-Lang-Syne in farming, such as we were wont to look upon forty years ago. when the old Cary plow used to kick our shins, in Connecticut. The plow in most common use here, is the "Canada Scotch Plow;" and any argument endeavoring to convince these people that there is a better kind, or even any kind at all, equal to this, is argument thrown away. There are a good many other improvements in agricultural implements and machinery, that are as a sealed book to the Canadian farmers generally, and I fear will continue to be so, during the age of the present non-reading generation.

A gentleman by the name of Hurlburt, of Toronto, has

¹ Samuel Hurlbert, proprietor of a foundry and machine shop, and manufacturer of agricultural implements at Prescott, Ontario, who patented an improvement for a plow on October 17, 1850. A further improvement was patented September 20, 1852, and Hurlbert's plows were shown that year at the Canadian National Exhibit. Mitchell, J. L., and Loomis, A. O. (comps.), Grand Trunk Railway Gazetteer . . . and Business Directory, 1862-63, describes his patented plow as "manufactured with an iron beam . . . and also, with a wood beam of the usual form. Its chief peculiarity . . . is, that the working side of the mould-board is uniformly CONVEX, from front to rear, and also, from top to bottom, so that a concave arc of a circle applied either horizontally or vertically, will fit in every part, while the curve from the point to the tip of the wing is

spent a good deal of labor upon a machine to go by steam, to supersede the plow in some cases, and thinks he has now got it so it will work advantageously. The principle is more like spading than plowing. I hope with all my heart, he may be quite successful. There are many more things I might have seen in this part of Canada, and much more that I did see, that I might write about; but as I am only out for a "flight," I must plume my wings and away. So let us step on board the Princess Royal steamer, a very good boat, of the slow and sure line, for Kingston, 180 miles northeastward.

The north shore of Ontario, below Toronto, appears dotted along with small farms, upon which that sign of prosperous condition, a good barn, is often conspicuous. The first town of any note is Port Hope, which is really a very hopeful looking place, occupying a smooth valley that opens up through the hills with a gradual slope from the water. It has an excellent wharf and good-looking buildings, and with one exception, I must commend the place. "Port Hope whiskey" has long been the most noted and abundant article of export from this town, and I fear that some of the bricks of its nice looking edifices are cemented with the tears of widows and orphans of those made drunk upon its wicked abominations. A neat church was seen peeping out of the trees upon one of the hills. and at the foot of another, upon a grassy, shady plot, on the bank of the lake, some dozens of boys and girls were making the earth glad with joy, while the setting sun gilded the trees over their heads, dancing to the merry notes of a poor old blind fiddler, and as we left the wharf, carrying away one of their companions, they made the earth resound with such cheerful notes as only are heard in those spots where dwells rural simplicity.

such as to turn the furrow perfectly. Among its advantages are:—Lightness of Draft—Cleaning well in the most sticky soil—Capability of cutting deep as well as shallow—Turning furrow well at any speed—Ease of guidance, and—Great durability. A raise is attached in front of the coulter to prevent clogging." Letter from the Public Library of Toronto. See also post, 510 ff.

A few miles further on, and we pass Coburg, another thrifty-looking town, containing about 3,000 inhabitants and a costly artificial harbor. Many of the Canada towns seem to have a pride in one conspicuous public building. Coburg is in the enjoyment of this feeling, in a very splendid stone edifice. I regretted after it was too late, that I had not made arrangements to visit these two towns, and if I had known their importance, would have done so.

From here to Kingston, the passage was by night, but I was told the coast possessed no great attractions. I arrived in this ancient military-looking strong hold, on Sunday morning, August 18th, the weather perfectly clear, but cold enough to make a fire agreeable, if I could get it; but as that is not convenient, let us ramble out in the sunshine, and warm up a few ideas for my next letter.

SOLON ROBINSON.

Kingston, Canada, August 19th, 1850.

#### SKETCHES OF CANADA.

[New York American Agriculturist, 9:343; Nov., 1850]

[August 20, 1850]

Kingston.—There is not much in, nor about this town to excite the attention of an agricultural traveller. It is situated at the northeast corner of Lake Ontario, in latitude 44° 15′, upon a formation of blue limestone that affords a very abundant, cheap material for building, as may be seen in the numerous handsome edifices in and around the city, which is said to contain 13,000 inhabitants, counting the large military force stationed here, and all that are in, or ought to be in the penitentiary, and including all the suburbs. It is in appearance and manners of the people, very English, and some of their customs are very unlike those of our Yankee notions. For instance, the times of eating—breakfast at 8 o'clock, lunch at 12½, dinner at 5, and tea at 8. This custom, also, prevails at Toronto and many other places.

I before remarked that the Canadians have a sort of fancy for showing off in one extravagantly-fine public building—a sort of Mormon Temple. In this particular. Kingston has made a display of the grandest order in her market house. It is built in the form of a T, the front 240 feet, two stories high, with a large dome in the centre. affording room enough for all the courts and public offices the city will require for five centuries. The end of the projection, or bottom of the T, is also two stories, surmounted by a balcony and clock, and if it stood alone. would appear like a large building. The long intervening building is the butchers' market above, and sundries in the basement. The whole is of beautiful, hammered stone. and certainly presents an imposing appearance. are, also, several very handsome stone churches, court house, jail, barracks, nunnery, Catholic seminary, hospitals, storehouses, and dwellings, and a little north of the city, fronting the bay, the extensive buildings and walls of the penitentiary stand out in bold relief to warn the honest man to remain so. Upon the other class, it has but little effect, for "A rogue's a rogue for a' that."

The whole front of the town is fortified in such a manner, that the whole Yankee nation never would be able to take it—until they made the attempt. Two routes of navigation to Montreal are open from here, one by the river and canals of the rapids of the St. Lawrence, and the other by the Rideau Canal and the Ottawa River.

There is very little wheat raised around Kingston, not-withstanding its limestone soil. And I believe very little, if any produce, is exported. Grass seems to be the principal crop; but if I may judge from the few cattle I saw alive, and the carcasses in market, both cattle and sheep are of the small order. Horses are not generally so good as at Toronto, and I fancy there are few places where they are. Oats are a considerable crop, and are now, August 20th, being harvested, and I suppose will be eaten by some other animals besides horses, as I saw several signs of "oat meal for sale." Barley is also grown largely,

or else it must be imported; for certainly, it is much used after being reduced to a liquid form, to which is added a few hops. And I wish it to be distinctly understood, that I am not of the opinion that this is the only drink made use of by the Canadians. I certainly do believe the prevailing habit of excessive drinking is one, if not the cause of want of energy to improve the agriculture and manufactures of the province. It is a misfortune that rests incubus like upon the great body of the people; and I do most respectfully suggest to agricultural societies, to offer premiums to all farmers who will dispense with the use of all intoxicating drinks upon their farms, as one of the means best calculated to arouse a spirit of improved agriculture. Another important consideration should be to induce farmers to read. This may be done in some degree by giving agricultural papers and books with all premiums, and to all who become members, as is now the case to a limited degree.

I met, at Kingston, with Mr. Marks, the acting president of the Colonial Agricultural Society, a very respectable and worthy individual, no doubt, but altogether too much of the "ancient and honorable fraternity" of Auld Lang Syne, for a station that requires vigor of body and intellect, and a little "book knowledge," to infuse a spirit into the farmers that no amount of money which parliament may grant will ever accomplish. One of the curious things one sees here, contrasting with towns in the states, is the military, pacing up and down before one's house. as sentinels, or in squads, at every corner, or occupying many a bar room, or drinking shop, of which there is no scarcity. I witnessed a march of somewhere near a thousand of "Her Majesty's Rifles," through the street, on Sunday, going to church; all stout, athletic young men, and I could not help thinking what an amount of human food might be produced by the well-directed labor of all these eaters of the bread of idleness.

A Big Dairy Farm.—While leaving Kingston, one of the Thousand Islands we passed, was pointed out as a very extensive dairy farm, owned by a Kingstonian, upon which my informant stated, the owner keeps two hundred cows. Whether the number stated is correct, I cannot say. It only seemed large, because it was in Canada. In New York or Ohio, I should not have doubted nor wondered.\* From the yards, spouts are made to conduct the milk to broad tin vats in the milkroom. The land upon these islands is very level and thin upon its limestone foundation, and of but little value for any other crop than grass. The marks of improvement are very primitive, so far as seen from the boat in passing.

SOLON ROBINSON.

#### JEFFERSON-COUNTY DAIRY FARMING.

[New York American Agriculturist, 9:331-32; Nov., 1850]

[August 21, 1850]

It would greatly surprise some of the western and southern stock farmers, who boast of their favored climate and rich pastures, to visit this rock-bound county upon the shores of Ontario and the St. Lawrence, to see how much more money is made by the produce of cows in a climate of six or seven winter months, than in regions where it is very mild or frost quite unknown.

In my late flying trip to Watertown, N. Y., I had the pleasure of a visit to the farm of Mr. Moses Eames, about seven miles from the village, 600 feet elevation above it, and 1,200 feet above tide water, and north of latitude 44°. The surface is quite hilly and stony, with underlying rocks, and would be thought by strangers cold and unproductive. Now, August 21st, is the season of harvest of wheat, oats, barley, and grass. Mr. E. keeps forty-

<sup>\*</sup> Afterwards I was informed the true number is 130.

¹ Moses Eames, son of Daniel Eames, who settled in Rutland, Jefferson County, in 1800. President of the Jefferson County Agricultural Society in 1849. His method of making maple sugar is described in the Annual Report of the Commissioner of Patents, 1844, pp. 297-98. History of Jefferson County . . ., 506 (L. H. Evarts & Co., Philadelphia, 1878); Cultivator, n.s. 6:375 (December, 1849).

three cows, and makes a cheese every day, that will weigh, when ready for market, 90 lbs., worth six cents a pound at home, or \$5.40, besides a liberal supply of milk and butter for a large family. And better butter and cheese, I never tasted; nor did I ever sit at a better table than in this farmhouse—this American farmer's home—Ah, "Home, sweet home," indeed.

Milking the Cows.—These are driven from the pasture long enough before night to enable the laborers to finish by daylight, without haste. From the lower yard, about half are driven into a commodious stable, and fastened in a long line by "stanchions," composed of two upright pieces of wood about five feet long, one of which is fast in a sill, and in a girder at the top, and the other moveable so the top falls back to give the cow convenience of putting her head and horns between, and is then closed with a catch, almost as fast as a man can walk along. Cows soon learn to take their places without any confusion. As soon as all are fast, the milkers commence, each being seated upon a stool, or chair, with a sort of back attached for the convenience of handling, and a great convenience it is. The milking is done with both hands, as rapidly as possible, as the owner has found that a dribbling milker will deteriorate the best cow in a very short time. As soon as all are done, the first section of the herd are turned out at another door, which opens into the upper yard, and then the second section is brought in. and when all are done, they are driven again to pasture. In the morning, the same course is repeated.

The Advantages of Stabling to Milk, are, that all the cows are sure to be milked—all stand quiet while milking, and there is no hooking and running one after another, and upsetting milk and milkmaid. If it is rainy and muddy, all are sheltered and upon a clean floor, and men and beast are better tempered, and give and get more milk, and save a deal of scolding, much time, and more money; insomuch that a herd of forty cows will pay for a shelter in one season. Putting in one half at a time,

is an advantage; for twenty are easier managed, with less huddling in the stable than forty, and are only confined half as long, make less droppings, and only require half as much stable room, and each section has an opportunity to drink in the yard while the other is in the stable.

Disposal of the Milk.—The milk pails are carried as fast as filled to the milkhouse, and emptied into a vat of suitable size, say 7 by 4 feet, and 2 feet deep, made of wood, lined with tin, having a space between, into which cold spring water is drawn at night to cool the milk and promote the raising of the cream. This vat is elevated upon legs for greater convenience, so that the top is some 3½ feet high. When the morning milk is added, the water is drawn off and a conducting pipe from a small boiler fills the space with steam to scald the curd, which is made in the same vat. The steam is then turned into a barrel of water and heats that ready for cleansing utensils without the least trouble.

Taking off the Whey.—Another vat of a smaller size. with rollers in the legs, is placed along the side, and surface whey dipped off, and then it is rolled to a spot where a conductor, opening through the floor, receives the contents and carries it down to the pig pen. The curd is next dipped into a strainer in the small vat and the whey drained off, and then it is rolled along side of the press, and put into the hoop upon a sliding board, so the whole is done without any hard lifting. The press is one of Mr. Eames' own make, and with a small weight, will give seven tons' pressure. In turning the cheese in press, a small wheel table is rolled along side, upon which it is done with ease. Upon the same, it is conveyed into the cheese room, where the cheese are kept upon long tables. and turned by rolling upon edge and over, which is generally done by Mr. E. himself, but without great exertion of strength.

The next process after placing upon the table, is, to bandage with thin muslin, made on purpose and costing only three cents a yard. The strips are cut two or three inches wider than the cheese is thick, and the edges turned over the corners and sewed, so that it is impossible for a cheese to spread or flatten down as they formerly did before bandaging came in fashion.

The Temperature of the Cheese Room is kept cool and dry by using a stove to drive off dampness, and then it can be frequently washed with cold water.

The Average Product of Dairy Cows, in this county, is from \$25 to \$35 each, per annum, and the average value per head from \$20 to \$28.

Wintering Cows.—Two tons of good hay is the amount estimated for each cow, besides straw and other coarse feed. If giving milk, grain or roots are added, as everything extra fed is paid for in extra milk. The cows are generally of the common breed, but look remarkably fine, not only upon this well-conducted farm, but upon hundreds of others of the same sort in this rich farming county.

Buying Curd.—I was told of one man, in this county. who buys the curd of five hundred cows, every day, and makes it into cheese. I understand that he pays five cents a pound, and takes it fresh as soon as well drained. Mr. E. says he can afford to pay that price. Cheese and butter are the staple exports of this county, and no graingrowing region, within my knowledge, can show so large a proportion of wealthy farmers, good farmhouses, goodlooking and well-improved farms, and such a number of well-to-do-in-the-world people as Jefferson county. women and children here take more interest in agricultural improvement and know more about it, than a majority of the men in some places. When you know the farmers' wives there, you will not be surprised to find such pretty girls and noble boys. Would you know the reason? They read. Yes sir, they read, and read agricultural papers, too. One handsome, intelligent boy, about fourteen years of age, came up to me just as I was leaving, and said, "Mr. Robinson, I should like to have you send me the Agriculturist for a year. Here is the money."

That boy will make an intelligent, good man. The same boy had the sole management of a large family garden, the past summer. I need not tell you it was a good one.

Jefferson-County Agricultural Society.—I will tell you what fosters and keeps alive this spirit of improvement in this county. They have one of the oldest and one of the most active and efficient agricultural societies in the state, and the society have a hall, or place of meeting, upwards of 200 feet long and 50 feet wide, capable of accommodating three thousand people. It was built by the funds of the society, and is emphatically "the people's meeting house;" for there, all large public meetings are held, besides the agricultural annual fairs. What other county will look to this one of the north for an example, and go and do likewise?

In addition to the improved progress of agriculture, manufacturing of cotton, wool, paper, flour, axes, and many other things flourish here in an equal degree.

Plank Roads.—There are six of these valuable improvements leading out of Watertown, which is rising from the ashes of the great fire, like a phœnix in revivified plumage.

Thin Soil.—Much land in this county lies upon a flat surface of rock, so near, that the plow sometimes runs quite down to it. When this is lime rock, the land is very productive and does not suffer so much as I should expect by drouth. It produces sweet grass and is more valuable for dairy purposes than any other. A railroad, now building through this county, will soon open its hidden treasures to the view of the world. Indeed, I intend to see more of it myself.

Creating a Spring.—When fitting up his dairy, Mr. Eames was much at a loss about a supply of water, having no spring that would give him a constant running stream. But he got one, and the way he did it is worthy of notice and imitation. He examined the sidehill, about one hundred rods above the house, and selected a favorable spot, where the land had a "spouty" appearance, and

dug a reservoir and wing ditches to form underdrains into it, and soon had the satisfaction to find the plan succeed which gave him a living fountain that runs summer and winter in the cowyard without fail from the drouth or frost. This is only one of the fruits of an intelligent mind devoted to agricultural improvement, and possessed by a self-made man. But he is a reading man as well as a working one.

SOLON ROBINSON.

### FURTHER NOTES ON JEFFERSON COUNTY.

[New York American Agriculturist, 9:372; Dec., 1850]

[August ?, 1850]

FROM Kingston, I took a run across the lake, 40 miles, to Sackett's Harbor, upon that beautiful American boat, the Bay State, making the trip in two and a half hours. The American boats, like almost everything else undertaken by Yankee enterprise, have much more of the goahead-quality, than those of the British.

Sackett's Harbor, is a town of some 1,200 inhabitants. situated in what may be termed the southeast corner of Ontario, once a flourishing military station, the glory of which has departed. Like Kingston, it depended upon the army and navy, instead of the soil, until the glory of the town has also departed. The extensive barracks are almost useless, and an enormous shiphouse and its inclosed frigate, which has stood there more than thirty years, is not only useless, but a monument of the foolish waste of human labor. If the half million of dollars it cost, had been spent in the endowment of an agricultural school, how much the sum of human happiness might have been increased, and how much better defence against enemies, would have been the minds of enlightened men, than is this wooden monument of folly. town is the principal port of the wealthy agricultural county of Jefferson, a county rich in her enterprising citizens, and rapidly growing more so through her dairy products and manufactures. It contains two hotels.

besides a few taverns, and other conveniences for consuming the alcoholic portion of Indian corn. There are several respectable stores, and more churches than manufactories; and a bigger custum house, *in proportion to the commerce*, than New York or Boston can boast of.

Watertown.—This is 10 miles east, the seat of justice for the county, containing about 6,000 inhabitants, and is altogether a very flourishing go-a-head sort of a place; and since the great fire, that consumed the business part of the town, several splendid blocks of stores have been built, and others are building, equal to those of any inland town in the state. In private residences. I will match this place against any other in the Union, large or small, to show as great a display of common sense in their arrangement. I certainly never have seen so great a proportion of remarkably neat, moderate-sized cottages, embowered in lovely groves of ornamental and fruit trees, with grassy lawns in front, (for all stand back from the street.) as all dwellings always should in town or country. The grove, surrounding the house of Mr. E. S. Massey,1 whose hospitalities I enjoyed during my short visit, is one of the most beautiful native growth, I think, I ever saw. The trees are mostly sugar maple, for which and their rich products, the county of Jefferson has long been celebrated.

An immense grapevine springs from one corner of the yard, and extends itself upon several trees, and frequently gives fifteen or twenty bushels of rich fruit in return for the little plat of soil it occupies. Go, sluggard, and plant a vine, and thou, also, shalt enjoy such luxury.

Note.—The article in the November number, entitled a "Jefferson-County Dairy Farm," would have been the proper continuation of this.

SOLON ROBINSON.

<sup>&</sup>lt;sup>1</sup> Edward S. Massey, born in Watertown, New York, October 18, 1806; died March, 1873. His parents settled in Watertown in 1800. *History of Jefferson County*, 215. A portrait of Mr. Massey and an illustration of his residence face page 152 in *ibid*.

CONNECTICUT FARMING—REVERSE OF THE PICTURE.<sup>1</sup>
[New York American Agriculturist, 9:266-67; Sep., 1850]

[August ?, 1850]

Having been pent up in the close atmosphere of the city for some weeks, after my return from my southern tour, I felt as though the sight of something green, besides the scanty grass in the park, or doubtful hue of the trees, would be soothing to a spirit that loves the green hills and sweet air of the country, I started off in pursuit of such a scene. It so chanced I took the New-Haven Railroad. As we passed Norwalk, I thought of the farm of Mr. Stevens,<sup>2</sup> of which you published a notice in April, and would gladly have called to look at his improvements, if I had known he was at home. However, I concluded to defer that, and rolled onward, noting that even Connecticut farmers are becoming sensible that the rocky hills and gravelly knolls may be made more productive, by a more judicious system of cultivation.

As we approached the busy, bustling, beautiful little city of Bridgeport, I discovered about a mile off to the left, a singular-looking structure which a friend informed me was a *Connecticut farm house*, as it was the residence of Farmer Barnum. I determined at once to make him a visit. No doubt many of your readers, as they have caught a glimpse of this most remarkable edifice, as it shows its head, or rather heads, among the trees upon the plain, back of the town, have wondered what prince, or eastern nabob, had come here to the land of steady habits,

<sup>2</sup> The farm of L. M. Stevens is described in the American Agriculturist, 9:123 (April, 1850).

¹ The editors prefaced Robinson's article as follows: "IT will be recollected that we published some letters of Mr. Robinson, last fall, which gave slight offence, because, as was alledged, he selected an extreme case or two of negligence and bad farming to be found, and exposed them to the public gaze. We are certain his object was only to awaken a spirit of improvement among the cultivators of his native state, and not to ridicule, nor find fault with things as he found them. We now give another letter of his, in which a brighter shade is given to the picture."

and gambrel-roofed houses, and erected a palace. curiosity should prompt him to take a nearer view, he will be still more surprised; for he will see a building unlike any other in America. It is three stories high, besides the basement, in the central part, and crowned with a dome, somewhat like the capitol at Washington, which is supported by lesser ones, and minarets upon the corners of the main building and wings, after the style of some oriental palace. The entire front is 120 feet, including at each end, a half circular conservatory, with dome roofs, which give a beautiful finish to the wings. front portico, with its costly carving, and ornamental finish, has a very inviting look of enjoyment in a warm day, while that in the rear, (enclosed with glass,) is equally so, in a cool morning; for there, the invalid, shielded from the wind, may take a long morning walk in the bright sun. Strangers sometimes think the appearance of the house fantastic, and perhaps conclude the owner is some vain fellow, who has inherited a fortune to spend, and is in a fair way of doing the job rapidly. Besides the house, he sees a most costly conservatory, or grapery, and gardener's cottage, carriage house, stables, and barn, with little temples, summer houses, and other necessary structures, all wearing their domes and minarets in perfect keeping with the principal building, and showing an apparent expenditure of money beyond the means of ordinary mortals. How mistaken in all his conclusions. The proprietor, is no other prince nor nabob than the somewhat celebrated P. T. Barnum, owner of the New-York and Philadelphia Museums; who has made his wealth by his own exertions, and is freely spending it in beautifying and improving the soil of his native land. Instead of being unapproachable, he and his family appear just as all well-cultivated farmers' families should appear; affluent, without that ostentation that makes themselves and guests uncomfortable. Mrs. B. is a woman "who careth after her household," seeing with her own eyes that all things are in order; even the kitchen, the most important 420

room in every house, is so kept that a look into it will not sicken one of the meals prepared there.

It is needless to describe the interior of this "Connecticut farm house," only to say it is planned with attention to comfort and convenience; and though richly furnished, not too much so for such a mansion. It has several things that some others should have, one of which is, a wellselected library. In this, we noticed complete sets of the old English divines, the classic, English, French and German histories, and all the best works on agriculture. The walls of the rooms and passages are ornamented with choice pictures and engravings. Bath rooms with hot and cold water, and shower baths serve to purify the body, and that tends to purify the mind. Bedrooms, as they always should be, spacious and airy. There is a spacious dining room, and rich table furniture; yet, the style of living and every-day habits of the family are such as might be expected where good sense directs. An iron fence that cost \$5,000, besides the stone foundation, adorns the front of the lawn. Outside of this, a row of maples, an American tree, that is very ornamental. A grassy lawn and carriage road, with a profusion of shrubbery and flowers, and newly-planted forest trees, beautify the grounds. Further back is a handsome young orchard of choice fruit. Behind the barn and stables, runs a little brook that feeds the fish pond, which, with its little island, forms an ornamental feature in the rear of the house. Beyond this, a field which bore a "premium crop of Indian corn last year." Grazing upon rich pastures, are a couple of superior cows, that furnish the family with plenty of rich milk, cream, and butter, home made; and in the pens, not in front of the house, are some good pigs and porkers, furnished with a provision of swamp muck and trash for making manure, indicating the knowledge of the proprietor, that nothing but manure is wanted to renovate the worn-out lands of Connecticut. This lot contains seventeen acres, for which he paid \$12,-000, and rumor says, upon the house, grounds, and fur-

nishing, \$200,000 have been expended. In this case, as in all others, improvement has increased the price of all the surrounding land, to double or treble the former prices. Mr. B. has lately bought an old field, which, according to the old order of Yankee farming, has lain untouched by the plow for a quarter of a century. He paid \$150 an acre: but it is doubtful whether the owner ever made interest on a fourth of that sum from its poor pasturage. Through the lot runs a small stream, and of course a row of alders along its bank. The first step was to clear off all the brush and roots, and dig a draining ditch, take out a bed of muck, about three feet deep, and cover over the surface of the whole field, until it was as black as charcoal, to lay and freeze and thaw till spring, then receive a good coat of ashes, and be plowed under. Another portion formed a great compost heap with stable manure. and occasionally the carcass of a dead horse, or other domestic animal, which many farmers throw away, worthless. In the effort to plow deep, he discovered a valuable bed of stone. Another field, lying in the same condition of eternal pasture, he bought for \$60 dollars an acre, and has purchased a few acres of swamp near it, to get muck for manure. Another small lot he is underdraining. He is doing these things not so much with a view to profit, as to gratify his taste for making improvement, and also to show his neighbors that there is no need of their old barren fields, lying almost worthless all over the country, for they can be easily renovated and made as fertile as the virgin lands of the west. He has made a small trial of guano, which, if it succeeds well, will enable him to renovate the old fields very cheaply. I hope his success may be commensurate with his public spirit and desire to create a disposition among the people to improve their land, by a better and more enlightened system of agriculture.

It is a pity the same spirit is not more universal. Notwithstanding the great improvements that have taken place in this state, within a few years, there is room for greater ones. Solon Robinson.

#### THE SENSE OF SMELL.

[New York American Agriculturist, 9:283-84; Sep., 1850]

[August ?, 1850]

INSENSIBLE must be that person who can take a beautiful and fragrant rose into his hand without feeling thankful for so good and perfect a gift. With the most systematical form and color is blended an odor more exquisite than all the arts of the chemist's laboratory could ever imitate, or we enjoy, but for the sense of smell. This lovely flower is a favorite among all people wherever it grows, and is more sought after by civilised man, than any other. Why? Is it because of its beautiful varying tints? No, for other flowers, the dahlia, for instance, in this is more wonderful; but it lacks odor. It gives no pleasure to the sense of smell. It is this sense that gives us a higher degree of enjoyment than the sense of sight. How often have been sung the pleasures of the hav field—the beauties of making hay. Deprive us of the sense of smell, and what would we find there to attract us to the spot and give us pleasure?

The objects about which the sense of smell is constantly employed are as incomprehensible as the other creations of the same power that created these. They are no casual productions, they are given to make man happy if he so wills it. The sense of smell is the poetry of all the senses. It may be cultivated with taste. Our dwellings may abound with sweet flavors as well as pleasing views. Everything that is cultivated to corrupt the sense of smell, should be as carefully excluded from the vicinity of our homes, as things that are offensive to the sight, if we would avoid corrupting the minds of those more than tender plants we are rearing there. Familiarity with corrupt smells will corrupt the taste, and render the sense of smell obtuse to the pleasures always enjoyed by this pleasure-giving faculty in an uncorrupted state. This sense, too, should always be consulted for the benefit of our health. That which is offensive to it, indicates that the salubrity of the atmosphere is affected, and should warn us at once, to remove the cause that is slowly diseasing the human bodies that come within its deleterious influence. But the disease of the body is not so certain as the disease of the mind, that lives within the influence of such vile smells as fill the precincts of some places, some human beings denominate their *home*, a word that should always call up a sacred feeling of love to hear it spoken.

Here is the picture of a "farmer's home" I lately visited. Not five rods from the door there is a duck pond daily stirred up by a dozen dirty swine, filling the air with anything but the scent of roses. At the east end of the house, and directly under the window of the "spare bedroom," stands—What do you think? A rose or lilac, or a bed of flowers, or a climbing honeysuckle, to fill the room with sweet odors, as the morning sunbeams find their way through a curtain of green leaves, charming the sense of smell of those who sleep there, and awakening in their minds a feeling of thankfulness to God. for the gift of smell and odors of flowers that give it gratification? No. Instead of these, the space is filled with hen coops—useful, to be sure—but out of place, and corrupting the atmosphere with a most villainous stench. On the south side of the house, and directly in view of the door of the dining room, and scarcely fifty feet from it. stands a small building, which should always be located far away from the dwelling, and if possible, out of the range of prevailing summer winds, shrouded with evergreens and creeping vines, and kept in such condition by the use of substances that absorb ammonia, and frequent cleanings, that the sense of smell should scarcely be offended by a visit to it, as it now is while partaking of the morning meal. By the side of the back kitchen door, stands the swill barrel, steaming with putrifying buttermilk and bonny clabber; and just three rods off, is the trough and pen where it is fed to the pigs; and immediately in connection with that, the cowyards and stables. On the side opposite the swill barrel, and within three feet of the door, is the spout of the kitchen sink, and an open drain to carry all the dirty suds and slops slowly winding along between overhanging weeds to feed the duck pond first mentioned. The house itself, a one-story, shingle-sided, gambrel-roofed, unpainted structure, with stone chimneys, stands corner-ways to the road, and separated from it by a crooked rail fence, and rickety gate, without a single shade tree to hide its hideous nakedness, nor a flower to charm away the offence offered to the sense of smell by all the horrid things surrounding this farmer's home.

Can the inmates of such a house be pure in heart? Does not the mind of man grow upon the food it feeds upon? Can the sense of smell be blunted and save the moral faculties free of contamination? Is it to be wondered at that children, who have such a home as this, whenever their minds become elevated by visits to more pleasing scenes, lose their love for the old birthplace of themselves and their ancestors and wander far away from fatherland, in pursuit of enjoyments that might have been procured at home, only that they have been sickened with everything connected with it that calls up a reminiscense of its offensive sights and smells?

Shall we be told these things cannot be avoided on the farm—that manure must be made, and such objections arise from ridiculous fastidiousness? Truth will answer, the more cleanly the premises, the more free from offense to the sense of smell, the more are the fertilising properties of all offensive substances saved and locked up in fresh mold, charcoal, peat, copperas, tanner's bark, or better still, gypsum, which have been freely used, to keep the air sweet and pure, and concentrate the escaping ammonia in a solid form, to carry to the field, and increase the growing crops to a value ten times greater than all the cost of the substances that in the using have added so much to the pleasures of the farmer's home. Fastidious indeed! Pity it were not more fashionable. If you would make your children coarse and unintellectual

beings, rear them in just such a place as I have described; scold them for being too fastidious if they "turn up their noses" at the vile odors surrounding them, and you will succeed in blunting the sense of smell and every other faculty that distinguishes man from the brute. From the brute? That is a slander upon the delicate sensibility of some of the brute creation, and nice faculty of the sense of smell, which they possess, and which prompts them to avoid locations that none but man, whose sensibilities have been contaminated by long association with filth, would ever think fit for a habitation.

In the case of inferior animals, how wisely this faculty has been adapted to their particular purposes! With what unerring certainty the faithful dog follows the footsteps of his master through the masses of the crowded street or wild jungle of the tangled forest! God gave him the sense of smell, and unlike man, he has not abused it.

The strength of this sense in the blood hound is still more wonderful. Give him but one smell of a cast-off garment of the fugitive to be followed, and he will distinguish his track from all others. The acute intelligence and determination which these animals evince in pursuit of a quarry, is almost indescribable. The fineness of the sense of smell, possessed by the deer, is often of great advantage to the Laplander when travelling over a vast expanse enshrouded in snow. It is only by their smell of the moss, though buried several feet, that they can tell whether the spot chosen to pitch the tent is upon land or water. Many a lost traveller never would have been rescued from his snowy death bed, but for the delicate sense of smell possessed by the convent dogs of the great St. Bernard. Caravans, overwhelmed and lost amidst the desert sands of Africa, have been saved from destruction because the camel possessed and exercised a faculty that man is constantly at work to blunt and destroy—a faculty which, if cultivated, would add greatly to his happiness. Who that possesses a refined sense of smell, though he has spent years upon the ocean wave or city pavements.

but feels as though he snuffed the sweet fragrance of the fields and forest flowers, whenever he reads of scenes of country life? How the odors of the orchard fill his nostrils in spring when the mere name of the country tingles upon the sense of hearing. One of the sweetest of his pleasures of memory is the recollection of the odors that made him love the flowers with which God carpeted the earth where he first breathed their sweet fragrance.

> In vain for him the golden morn Awaked the song of vernal bird; No sight nor sound, emotion gave, Like that which fragrance stir'd.

Oh, ye denisens of the country, who might live in the constant enjoyment of Persian gales, how have ye perverted and abused this good gift of God, till ye are enabled to sit down contented to your morning and evening meals in the atmosphere of a duck pond or pig pen, and sleep in the fragrant effluvia of a hen coop, or drown the natural sense of smell, in the horrid stench of burnt tobacco.

S. R.

LETTER TO LEILA ROBINSON
[Ms. in Harry Robinson Strait Papers, Gary]

NEW YORK Oct. 20th '50

MISS LEILA ROBINSON.

My Dear Little Girl.—Yours of Oct. 2. and your sister's & yours of Sep. 21. I found waiting for me on my return to the city a week ago, & I have been expecting another all the week, and for two weeks I have promised myself every day that I would write. But I have been very much engaged, and the devil stands at my elbow now calling for *more copy*. So he gets the copy & not the copyist, very well. Did I tell you to write your cousin Sarah Lake at Smithfield, Phila Co. Pa. I wish you would. And I want you to take pains to write as well as possible. Sometimes your letters are very nice, at others not so. A little girl that has plenty of time

never should send a letter out of hand until it was as perfect as she could make it, if she had to copy it half a dozen times.

I have been so little in the City that I have not had one hour to go about & look up those things you want me to buy for you, but I hope to perhaps next week—this week I have got to go to Baltimore. If I had a memorandum of things to buy, I would contrive to get them, but the trouble for me is to begin to think what to look for.

I shall have to get them very soon if this fall, or it will be too late to send them. I hope you are going to school and also Charley, whom you say nothing about in your letters. You are very careless in your spelling. Gearl is not the right way to spell girl. Another fault is leaving off the last letter of a word in writing, which is a common thing with you.

I am glad to hear your mother was able to do such a kind act for Mrs. Rock, and I hope when I am sick I shall find some one to be as kind to me. But if I do get sick away from home, I shall wish I was there, for I never shall find any woman to nurse me in sickness like your mother. I had two days sickness in Phila though but slight it made me think that a Hotel is not a home. If I were to be taken sick in New York, I should be still worse off. But I shall not be long here. After I return from Baltimore, I shall remain about a month and then I am off for Florida this time certain.

Do my dear girl let me always hear that you are a good one—kind & obedient to your mother and affectionate to your brothers & sister & friendly & respectful to all & then by all you will be beloved, & particularly by your father

SOLON ROBINSON.

<sup>&#</sup>x27;Charles Robinson, Leila's brother.

STORING TURNIPS AND OTHER ROOTS FOR WINTER. [New York American Agriculturist, 9:347; Nov., 1850]

[October ?, 1850]

THROUGHOUT almost the whole region where roots are raised in any abundance for stock feeding, in winter, this is the most important month in the whole year; for now is the season in which they must be secured against frost. Nine tenths of all those which are lost every winter might be saved by attention to them this month. A few hints, although often before given, will still be useful to some of our readers, new beginners, perhaps, as to what should always be done in putting away these valuable crops for winter.

Storing Turnips.—First, be sure and pull them in dry weather, if possible. Throw them together as they are pulled, but not in large heaps; otherwise, the dirt adhering, will become mud by the sweat of the pile before the tops are cut, if suffered to lie any considerable time. Never pull nor wring off the tops, but cut them smooth with a sharp knife. Select a dry, smooth spot upon descending ground, to form the heap, which may be long or round, providing no round pile exceed 100 bushels. Lay the roots in a smooth pile, the sides on an angle of about 45°, and cover with straw, laid on straight, so as to form a good thatch. Rye straw is the best. Cover with just earth enough to preserve them, which will vary from two inches to two feet, in different latitudes of this No definite rule can be given. In all the country. warmer latitudes, the piles, or heaps, should be provided with ventilators. Nothing is better for this purpose than a bunch of fagots about six inches through. Four boards, six inches wide, nailed together, and bored full of auger holes, set in the centre of the pile, like a chimney, will answer an excellent purpose. The ventilator must be protected against rain, and carefully covered before freezing weather.

In digging the dirt around the pile for covering, form a continuous ditch, in order that water cannot run in.

Be careful the roots are dry and sound when put away, and you may be assured they will keep in fine condition.

Storing Common Potatoes, by the same rules, will be found most effectual. If you ventilate the heap, as above directed, you need have no fear of covering it too warm at first.

Storing Sweet Potatoes.—These are very difficult to keep, in all places, particularly in freezing climates. They must be kept very dry and warm. And yet not too warm. A very good plan is practised by Dr. Philips, of Mississippi, first, by laying down a bed of cornstalks several inches thick, which serves as an underdrain and ventilator, leading from the sides to the one in the centre. The outside, he also covers with cornstalks and a very little earth, and the whole protected with a temporary roof. It is a very cheap, and with him, a very effective way of preserving this most valuable edible root for all the southern portion of the United States.

Mr. DeLaigle, of Augusta, Georgia, raises from 3,000 to 5,000 bushels of sweet potatoes every year. A very common crop with him is 300 bushels per acre. His method of preserving them is in an immense roothouse, made of bricks, partly below the surface, in which the roots are stored with pine straw, which is one of the best absorbents of moisture he could use, and serves to keep the potatoes free from the dampness so natural to them.

Storing Beets and Carrots.—These roots require much more careful handling than turnips and potatoes, but with proper attention, may be put up and kept in the same way. Beets are often injured in cutting off the tops. They must not be cut too close, if you would keep them sound through the winter. Do not try to beat off the dirt adhering to the small rootlets. Let it dry and then adhere as much as will. To keep these delicious roots fresh and sweet for family use, pack them in dry sand, in a cool, airy cellar, but not cold enough to freeze.

S. R.

THE GREAT POULTRY SHOW AT BOSTON.
[New York American Agriculturist, 10:27-29; Jan., 1851]

[November 13, 1850]

I LEFT New York, last evening, on the Vanderbilt—a very excellent boat—and a lovely moonlight passage I had through the sound; arriving at Stonington, at 12½, and at Boston, at 4½ A. M., over one of the best railroads in the Union, at a speed almost fast enough to satisfy Yankee go-a-head-i-tive-ness. Whether this is the best of all the routes between New York and Boston, I am not prepared to say; but I will say it is a good one, and as worthy of patronage as any other.

The first sound that greeted my ears, the morning of my arrival at Boston, was one united, concentrated, tremendous cock-a-doodle-doo; uprising in the clear morning air from some two thousand throats; with which was mixed a fair portion of gander gabble and turkey gobble; with an occasional interlude, applicable to the occasion, of quack! quack!!! whether there were any real quacks present I do not know. The din of hackmen and hotel runners, for once, was put to silence. "For a noise went up to heaven as of many cocks crowing." And that noise in imagination, is still ringing in my ears; for I have been all day wandering among the coops, trying to learn what magic influence—what morus-multicaulis miracle of speculation hath so wrought upon the sober character of this Yankee population; as thus to gather together such thousands of biped beings, feathered and featherless, in one great crowing match of all New England.

The exhibition is held in the public garden, west of the Common, under a mammoth tent, which covers 23,716 superficial feet—over half an acre. This is filled with coops, arranged in rows and tiers, containing an uncounted number of all manner of domestic fowls, variously estimated from 6,000 to 16,000. From the notes which I saw of one gentleman who undertook to enumerate the multitude, I am satisfied the smallest number

comes nearest the truth. I am also satisfied that even this will be looked upon as an exaggeration, by those who were not present and who never felt the fever; because they will not be able to conceive how dreadfully that disease must rage through a community, to induce them to come together to the number of three hundred and thirty-eight exhibitors, with 6,000 head of cocks and hens, ducks and drakes, gobblers, ganders, geese, and Guinea fowls, in all sorts of coops and cages; some of which could not have cost less than fifty dollars a piece, and were probably got up especially for this occasion.

The following memorandum of the coops and kinds exhibited by Messrs. Pierce & Osborn, of Danvers, Massachusetts, will give your readers a pretty fair idea of the various sorts kept by those who make a business of chicken breeding, together with the regular "trade prices." To commence with the tallest kind:—

Coop No. 1, contains Shanghaes. Price, per pair, \$4, of three varieties. Parsons, Perley & Forbes' importation.

No.	2,	Black Spanish,	\$5 p	er pair.
"	3,	Guilderland,	3	- 66
"	4,	Rumpless,	3	"
"	5,	Dominique,	3	"
"	6,	Black Poland,	3	"
"	7,	White, do.	3	"
"	8,	Golden, do.	3	"
"	9,	Golden Hamburg,	5	44
"	10,	Spangled,	5	"
44	11,	Singapore,	3	"
44	12,	Silver pheasant, top-knot for	wls, 5	"
"	13,	Bolton greys,	3	"
"	14,	Brown Dorkings,	4	"
"	15,	White, "	4	"
"	16,	Yankee game,	5	"
"	17,	Java, "	5 to 1	10 "
"	18,	Sicilian fowls,	3	"
"	19,	Jersey Blues	3	"

46	20, Plymouth Rocks,	4	44
"		4	"
"	22, Chittaprats,	3	66
44	23, Royal Cochin-China.	6	4.6
"	24, Manilla Bantams,	3	66
66	25, Sebright, "	3	"
66	26, Cuba, "	3	66
"	27, White ducks,	2	66
66	28. Spanish, do.	5	66

This list only embraces a part of the varieties of one exhibitor. The yards and hen house, (which is an old conservatory,) of these gentlemen, covers about three acres of ground, upon which they keep an average stock of 1,000 head, and some thirty different kinds. During the breeding season, each variety is kept in separate apartments; the cocks being introduced to hens for the purpose of "judicious crossing," with as much care as would be shown to a Durham bull, or an English race horse. The feed is principally corn, costing 75 cts. a bushel, and is kept constantly before them in feeding hoppers, which are filled once a-fortnight. Oats, barley, potatoes, dough, and meat are fed occasionally; water every day. Cost of food consumed will average about two cents a week per head; and it requires the labor of one hand most of the time to look after the establishment. During the moulting season, all except the game cocks, are turned out to grass together. By keeping the house warm through the winter, with plenty of food, they get a supply eggs, which then sell for high prices in the city. In the spring, they bring much higher rates for the purpose of raising stock; not however to be eaten, as will readily be seen by the enormous sums they sell for, to others affected with the same fever. For be it distinctly understood, the above are not "fancy prices," nor such as an individual would generally have to pay for a single pair; nor such as have been realised during the day. I saw one cock change hands at thirty dollars. and a hen of the same Shang-high sort, at fifteen—the owner refusing twenty-five dollars for a pair, and I was credibly informed of another *transaction* at fifty dollars for a cock and hen; which I understand is not an unusual price among *the fancy*.

The owner of one of this giraffe breed, seeing an old farmer eyeing a remarkably tall specimen that was stretching his neck away up into the upper regions of a three-story coop, inquired of him if he would like to make a purchase; observing how much it would improve his old stock of poultry.

"Wal, I guess not; I live in a one-story house."

Why? What has that to do with the matter?

"Wal you see, I keep my seed corn up garret, and I don't want to lose it."

No. Well you don't want to keep your fowls up garret do you?

"Oh! Bless your soul no!"

What then? I don't see your objection."

"Don't see! No Sir, can't that tarnal great longlegged rooster stand on the ground and eat corn out of the garret window? You don't catch me with such a beast on my farm. Improve my poultry. Ha? Why, I would'nt cross that critter upon anything except a she jackass: and a darnation mean one at that. Faith! The hens look as though they were of that breed-I'm sure the owners are—they're all stern;" and with that sage observation he walked off with the air of a man whose dignity had been highly offended, with the idea that a gentleman of his appearance of good sense, should be offered a Shanghae cock to improve his stock of poultry; which, as I afterwards learned of him, consisted of some choice Jersey blues, a few brown Dorkings, and a good stock of vellow-legged Dominiques; also a few Bantams, to please the children, "Which, says he, "I would not give for the whole tentful of long-legged monstrosities, like these ugly brutes. What if they do weigh 12 or 15 lbs. a piece? They cost more than turkeys of the same weight, and are not half so good. Look into the Boston

markets, Sir! Do you see any good poultry? If you do, you will find such prices, that none but the wealthy can afford to buy; for of all this great show, not a single owner is engaged in the business of raising poultry to supply the market. And the reason is very plain—it wont pay. Poultry can only be raised in a small way, as I raise it upon my farm, where the cost is not felt. When kept up and fed, every hen costs a dollar a year; and the eggs will just about pay for the trouble of taking care of them and not much more. So you see, just as soon as these humbug speculating prices go down, down goes the hen business about Boston, in spite of all this crowing and cackling of a parcel of old cocks and young biddies."

I was gratified to find that the long rough-looking homespun check woolen frock, which had perhaps deceived the rooster man into the idea that the owner was a flat, was not a cloak to hide a mutitude of faults, but that it covered a form possessed of sound judgment and good sense; such as are often met with in similar working garbs in New England.

I find I cannot get through this great show in one letter, so good night.

SOLON ROBINSON.

Boston, November 13th, 1850.

# HEN SHOW AND HEN FEVER.

[New York American Agriculturist, 10:56-58; Feb., 1851]

[November 14, 1850]

IN my letter of last evening, I promised you some further account of the crowing match now holding in the great Boston henroost, where I have spent the day; and now, after retiring to my own room, I will give you my reflections upon it. No opportunity was ever before afforded in America, for so extensive an examination and comparison of varieties, as are here exhibited. The number, as I stated last evening, is variously estimated from 6,000 to 16,000. The secretary informs me that three fifths of the whole are those overgrown, overpuffed ani-

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THE GREAT MALAY FOWL .- FIG. 9. whole are those overgrown, overpuffed animals known as Shanghae, Chittageng, and Coehin-China birds, and pretty birds they are. Some of the first-named, are the most outlandish, ill-



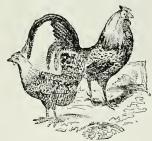
THE BANTAM FOWL .- Fig. 10.

looking, unloveable of all living things I ever improvement, but dead set against humbug, mated weight of body, 1 lb. 12 oz."!!! busy with pencil and paper by the side of a I enclose the sketch, which I hope you will

coop which contained one of these feather-legged brutes-about the ugliest specimen in the whole lot, I took the liberty of introducing myself, and peeped over his shoulder while he drew the portrait of a fellow, which looked as though he might have been the paternal ancestor of the original Shanghae family. After hav-



RED SHANGHAE COCK .- Fig. 11. variously estimated from 6,000 to 16,000. The ing completed the drawing, which had a very lifesecretary informs me that three fifths of the like Shang-highish appearance, he gave an extra wink with his laughter-loving eye, as much as



BOLTON GREYS .- Fig. 12

saw clothed in feathers—the Ardea minor, sand- to say "what's a cock without a name," and hill crane, or turkey buzzard, not excepted, wrote underneath the sketch, "First premium Observing a gentleman whom I recognised as Red Shanghae Cock. Weight entire, head, neck, a distinguished friend of all sorts of agricultural legs, spurs and claws included, 11 lbs. 13 cz. Esti-



mals known as Shanghae, Chittagong, and Cochin-China birds, and pretty birds they are. Some of the first-named. are the most outlandish, ill-looking, unloveable of all living things I ever saw clothed in feathers—the Ardea minor, sand-hill crane, or turkey buzzard, not excepted. Observing a gentleman whom I recognised as a distinguished friend of all sorts of agricultural improvement. but dead set against humbug, busy with pencil and paper by the side of a coop which contained one of these featherlegged brutes—about the ugliest specimen in the whole lot. I took the liberty of introducing myself, and peeped over his shoulder while he drew the portrait of a fellow, which looked as though he might have been the paternal ancestor of the original Shanghae family. After having completed the drawing, which had a very life-like Shanghighish appearance, he gave an extra wink with his laughter-loving eye, as much as to say "what's a cock without a name," and wrote underneath the sketch. "First premium Red Shanghae Cock. Weight entire, head, neck, legs, spurs and claws included, 11 lbs. 13 oz. Estimated weight of body, 1 lb. 1½ oz."!!!

I enclose the sketch, which I hope you will give your readers, as a *strong* likeness of a red Shanghae cock.

This is the same chap the old farmer objected to yesterday, on account of his ability to stand on the ground and eat corn out of the *garret window*.

Some of the Cochin-China breed might answer pretty well for any person desirous of growing chickens as large as turkeys. I am better pleased with their appearance, than with their taller China neighbors, the Shanghaes.

According to my notions of chicken beauty, the wild cock of India cannot be excelled.

The black Spanish fowls are very noble, military-looking fellows, in their glossy coats, and extremely high, red crests. That, however, is a great objection to them, in a freezing climate. The black Polanders, with their beautiful white top-knots, as large as full-blown roses, I

should very much prefer. They are great layers, though poor breeders; and therefore, are not particular favorites just now, while the hen fever rages so high, and the whole country is converted into one great chicken-hatching machine. Among the prettiest fowls in the show are the Bolton grevs. They are about the size of the old style of Dominiques, a few of which are also here; and I should think would be preferred by any man in his senses, instead of that long-legged, garret-window, corn-eating breed, clothed with dirty feathers down to their ugly heels. The Dorkings and Jersey blues are large enough, and good enough to suit any taste not vitiated by this mania of speculation in hen flesh. Among all this vast variety of fancy fowls, with fancy names, my fancy would not lead me to name more than half a dozen kinds from which to select for myself, or friends—and these should be Dorkings, Dominiques, Bolton greys, Jersey blues, black Polands, Java game, and perhaps, for fancy, a few Sebright Bantams.

Among the ducks, those which pleased me particularly were called Spanish—their neat, drab coats, closely fitting their moderate-sized, compact bodies. For beauty, the little wood duck excels any other of the *quack* family—those in the rooster trade included.

There were in the exhibition a few very handsome Bremen and China geese, and several small samples of turkeys; but the fever ran highest for the tallest kind of cocks and hens, both in size and price. The curiosity of visitors was about equally divided between the cage of an American eagle, upwards of twenty-three years old, and a pair of very large swans, belonging to the "old Marshfield farmer," better known among politicians, perhaps, as Daniel Webster.

The annexed beautiful picture of one of these birds will afford pleasure to your readers, and form an appropriate finis to my hasty account of the great poultry show.

Solon Robinson.

Boston, Nov. 14th, 1850.

#### A DAY IN WESTCHESTER COUNTY.

[New York American Agriculturist, 10:31-32; Jan., 1851]

[November, 1850]

THROUGH the politeness of the treasurer of the Harlem Railroad, I was enabled, or rather induced to make a little excursion upon this great city artery—a proper term, for it keeps up the circulation between town and country—and take a few notes for the benefit of my readers. The cars start from the City Hall, several times a-day and are taken by horses through the thickly-settled streets, occupying about half an hour; then by steam at a very moderate rate, owing to the numerous stoppages at a great number of growing villages along the line of this road. I noticed the singular fact, that these country residences are mainly supplied with marketing from the city, instead of their own vicinity.

This road is well conducted, and of immense advantage to the country through which it is located. The freight upon milk, alone, this year, will exceed \$40,000. It was over \$5,000 in the month of July—some days \$200—think of that, unimproving generation!

What would have thought the old settlers of '76-if they had been solemnly assured that the time would come to their children, when the matutinal milkmaid should send her rich product, warm from the cow, to the city, fifty miles distant, to be used for breakfast the same morning: while the messenger who carried it thither, should return again for dinner. What would have said Rip Van Winkle, if his sleep had been prolonged till the whistle of the locomotive had waked him to new life? He would not have been much more astonished, than some of the ancient and unbelieving denizens of the old shingle houses among the hills of Westchester. But the miracle has been accomplished, and the whole course of cultivation changed, for the tillable land has increased in value—and now every article of produce—everything valuable can be sent and daily sold in the city, and the owner lie down at night again in his own house, with the money under his pillow.

The great part of this county is composed of stony hills, more fit for pasturage than any other purpose. Milk is the most profitable article that can be produced. The dairyman gets two cents a quart, delivered in tin cans at any of the frequent railroad stations. Cows yield an annual average income of about \$30 per head. Cattle are driven from the west, every year and fatted here; and sheep would be, if it were not from the fact that farmers have been compelled to abandon keeping them, on account of the terrible destruction among them by dogs.

It was proposed in the agricultural society of this county to petition the legislature, for a law to levy a general tax upon dogs to pay for the sheep destroyed. Goveneur Morris¹ moved to amend the motion, reverse the order, and tax the sheep to support the dogs: as it was evident that a majority of the people of this county were more in love with dog meat than with mutton. He had tried to keep sheep enough to furnish his own table, but found that he could not do it unless he took them into his own bedroom every night. And even that would not save them; for they are frequently attacked in open day, in some secluded pasture. It is a pity that every one who keeps a sheep-killing cur, is not obliged to eat him. Young calves, too, are often destroyed by these intolerable pests of the Westchester farmer.

Much of the land in this county is suitable for fruit culture, and would be extensively planted in orchards of choice fruit for the city market, except for the reason

Gouverneur Morris, son of the Revolutionary leader of the same name, born in 1813, died 1888 in Westchester County. Interested in railroad construction in Vermont, Pennsylvania, and New York, Morris' first venture was with the New York and Harlem. Later served on the board of directors of the Illinois Central Railroad until his death. Keenly interested in the development of agriculture. Letter from the Public Records Section, Archives and History Division, University of the State of New York, to Herbert A. Kellar, May 11, 1936.

given at length in another article. But now, who will plant an orchard when he knows the fruit will be all stolen? Or who will buy a flock of sheep to graze his rocky hills, although good for little else than sheep walks, when he knows one half of them, at least, will go to the dogs, instead of the butcher.

I enjoyed a long ride with an enterprising young farmer, through the winding crooked roads, and over the granite hills, and saw much more to interest my mind than I can now relate. Everything has an ancient, and I must say rather behind-the-age appearance. Old-fashioned gambrel-roofed farm houses: old barns and outbuildings, covered with an old mossy coat; old mossy wells, with old iron-bound buckets; old willow trees overhanging the old spring house, from whence the same little rill has trickled down among the old grev granite rocks, through long centuries of old time. Old stone walls meet the eve at every turn, to mark where once was perhaps a fence: where now is an unsightly line of stones. greatly in the way of cultivation, which would serve a far better purpose if buried beneath the surface to act as underdrains, than they do in their present position. Much of the land is of a character that would be benefited by such a disposition of the surface stones, which, in many cases, have been laid into walls, just to get them out of the way. Do farmers ever think how much walls are in the way; or how much land they now occupy? I noticed upon one farm, five contiguous lots, not one of which contained an acre, surrounded by heavy stone walls; and the remainder of the farm was divided into inclosures of four or five acres each. Probably one tenth of the land was thus lost to cultivation, besides the loss of time in annual repairs, and keeping them clear of bushes. Close as this county is to the city, the majority of the inhabitants have not yet caught the infecting spirit of improvement, which is now animating the age, and fulfiling that prophecy which says, the crooked shall be made straight, and rough places smooth. But the time is speedily coming when old prejudices must give way.

This is a reading age. The young farmers of Westchester are beginning to take cheap facilities of obtaining practical and scientific agricultural information. Many of them will obtain and read this journal the present year. I hope we may have many a pleasant evening together.

Solon Robinson.

New York, November, 1850.

CARTS, DRAYS, AND OTHER THINGS.
[New York American Agriculturist, 9:370; Dec., 1850]

[November ?, 1850]

In almost every town, there is some peculiarity about the vehicles to distinguish them from any other place. In New Orleans and New York, the drays are similar—with stout shafts, broadboarded beds and projecting tail pieces and low strong wheels—a very convenient vehicle for the purpose it is used. In contrast with these, are the drays of Montreal and Quebec. Fancy a high pair of wheels, not stout, upon which is mounted a long narrow ladder with a very diminutive specimen of a horse attached to one end, no matter which, and the whole concern the most inconvenient, uncouth, unappropriate affair for the purpose that could be designed, and you have a Canadian dray.

In Louisiana, you may see many carts drawn by three mules a-breast, having wheels six or seven feet high, with enormous great boxes containing a travelling drygoods store. Similar ones are used upon plantations. To load any heavy article into one, requires a good deal of strength and engineering. They are as unfit for a farm cart as a Canadian dray.

Contrast with these a Canada cart; such as I first saw at Coburg, upon lake Ontario. The wheels are about four feet or four and a half high, with a crooked iron axle, so that the bed is hung within six inches of the ground. The shafts are attached to the cross bar of the forward end. The hind end is moveable. The conven-

ience of rolling barrels and bales in and out of one of these carts can readily be seen; and upon hard ground or plank roads, or a long wharf like that of Coburg, they must be extremely convenient and run just as well as though the load were mounted up in the air as high as the back of an elephant. There is common sense and utility in such carts for many situations. A very common sight in Canada are dog carts, and it is very surprising to see what large vehicles they are, and what loads a couple of stout dogs will carry. I doubt however, the utility.

Another very common vehicle, in Quebec, is the "caleche." It is somewhat like the body of an old-fashioned gig, without the top. In place of the dash board is the driver's seat; so there is room for two inside passengers. It is useless for me to tell you how they drive up and down these crooked mountain streets and lanes barely wide enough for two of these break-neck furies to pass. The thing must be seen to be believed. Don't offer to ride in one, unless your life is insured for the benefit of your family or some charitable institution and you feel quite willing to have your neck broken for the promotion of the happiness of those you leave behind you—a good way behind, if you ride long at the usual speed.

Upon the farm of Capt. Rhodes, near Quebec, I saw a wagon that had some new features about it, at least so to me, though common in England, I believe. Forward of the axle, in place of the horses, is a frame as wide and as far forward as the bed, with a convenient iron

¹ William Rhodes, Quebec, second son of William Rhodes, of Branhope Hall, Yorkshire, England. In 1838 joined the Sixtycighth Regiment of Light Infantry as ensign; after ten years resigned with rank of captain. Married the daughter of Robert Dunn of Quebec. Represented the county of Megantic in the House of Assembly from 1854 to 1858. Owned a riverside farm, Benmore, near Quebec, where by judicious cultivation and careful stock selection, he showed what might be done by a practical agriculturist in the face of severe winters. Achieved a considerable reputation as a sportsman and hunter. Notman, W., and Taylor, Fennings, Portraits of British Americans, 2:39-50 (Montreal, 1867).

work to attach one or two pair of shafts. The convenience of the plan is alleged to be, that, in many cases, the wagon can be used with one horse to advantage—that the two pairs of shafts are preferable to a tongue, because the cart harness, (without traces,) answers for the wagon, saving time in shifting and expense of extra harness.

The bed of this wagon is made as wide as it can be between the wheels and for convenience of turning, a jog is made upon each side where the forward wheels would strike, so it can turn very short and thus gives more room inside.

I have no doubt but this wagon is worthy of imitation; as, for instance, when required to be taken to the potato field in the morning to be filled during the day, and to be removed two or or three times within the time, one horse can do it as well as two. In bringing home a load of wood, as it is all the way descending from "the bush," (as all woodland is called in Canada,) Capt. R., finds one horse will do the work just as well as two. And so it is with many other things. The only objection I see to working two horses in shafts, is, that each works independent of the other. But for some situations, these and the Coburg carts, are both worthy an introduction in a more southern latitude. And much to the advantage of the Canadians, particularly about Quebec, would be an introduction of some of our very neat, strong, and light road wagons, in place of the universal little onehorse cart.

As for the Montreal drays, no one who has ever seen a different kind, would continue to use such an awkward contrivance unless as strongly wedded to ignorance and stupidity as are some of the cultivators of American soil, who still continue the use of implements equally awkward and inappropriate for the purpose, as ladder drays or dog carts, and some other things that they laugh at their neighbors for using.<sup>1</sup> Solon.

<sup>1</sup> The editor appended the following comment: "'Uncle Solon,' like many of his travelled countrymen, forgetteth the ways of his

### NEW-YORK MARKETS.—No. 1.

[New York American Agriculturist, 10:77-78; Mar., 1851]

[November ?, 1850]

THOUSANDS of our readers have never visited this metropolis—perhaps have never seen a great city market place, where the daily food of many thousand human beings is exposed for sale. It used to be, in our youthful days, a great mystery to us, how so many persons as we were told, dwelt in places where the roads were all paved with stones, and the houses touched each other, could live without a pork barrel, potato cellar, pig pen, or hen roost, and where they not only bought their milk, but water, too.

The mystery is not yet quite cleared up in our minds, though we have no doubt now about the abundant supply of provisions; but how all, who eat, obtain their food, is another question. If we could draw truthful pictures of city life for farmers' sons and daughters to look at, it would teach them to love their own homes—they would contrast their plain, but wholesome, sweet and clean food, with some of the miserable stuff sold in our markets, and exclaim, "God made the country—man made the town"—let us be contented with His work.

With a view to add to that contentment, we propose to devote a few pages of the present volume, in giving some slight sketches of our market places—those great marts of things, clean and unclean, upon which human life is here sustained. It may be instructive and amusing to

father land, while describing a foreign one. Surely he has not forgotten the peculiarities of the old Boston dray, or 'truck,' with shafts large and long enough for the sills of a respectable-sized house; nor the enormous load often seen upon one, of five or six hogsheads of sugar, drawn by as many horses. A long train of these great, uncouth-looking vehicles, winding through some of the narrow, crooked lanes, peculiar to Boston, is very suggestive of something somewhat sea-serpentish—the hogsheads answering for the 'humps.' Perhaps a better dray for all purposes cannot be found, than those in use in New York. They would be very convenient farming implements."

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those who have not vet availed themselves of the cheap facilities of railroad travelling, to visit New York, to fancy themselves taking a stroll with us among hecatombs of oxen, mountains of mutton, pyramids of pork. and piles of poultry, in Fulton Market. Do not fancy you will see a palace nor a market house that is an ornament to the city, like those of some of the towns in Canada, nor like Quincy Market, at Boston. On the contrary, you will find it a common, dirty-looking, one-story building, with an arched roof, about two hundred feet square, three sides of which are elevated so as to form basement rooms underneath the floor that contains the butchers' stalls, which extend in a double line along two sides of the house, while the third is occupied by a scaly company, composed of all manner of fish that swim in the waters between Cape Cod and Cape Fear.

The central portion, which is on a level with the street, is also roofed over, paved, and is occupied with a mixed multitude of everything that is eatable, to say nothing of that portion which is not. Here you will see an uncounted and uncountable quantity of barrels, boxes, baskets, tubs, and stacks of vegetables and fruit; and tons of poultry, eggs, butter, cheese, lard, and tallow, in all sorts of packages, except those in which neatness is particularly predominant. Upon one side of the square, is a row of dreary-looking cells, in which a large number of people are continually eating a great number of oysters, stewed, raw, and roasted. The quantity of this kind of food consumed in this city, if it could be correctly ascertained, would surpass belief.

Around the market house, upon the pavement, are the retailers of apples, nuts, cakes, and all sorts of trinkets and nick-nacks. Here sits an old woman knitting, by the side of the same table at which she has sat for many a long year. She not only sells the products of her own labor, but that of a great number of sets of knitting needles, busily plied around some country fires. A little further on, sits another and another, selling all manner

of fruits in their season. What a listless life, to sit all day long in the same place, day after day and year after year, trafficking by the cent's worth with every person passing by, who desires to gratify his longing for the luscious fruit spread out to tempt his appetite. Here sits a woman week after week through the fall months. cracking hickory nuts unceasingly. All these market women appear as though they were a portion of the human family set apart for that particular calling; and long usage in it has unfitted them for any other. Here is one, who has been known to the old residents, for at least forty years. She was one of the fixtures that was removed from the Old Fly Market, when the Fulton Market superseded it. Judging from her healthy and robust appearance, she may still sit in the same stall through summer heats and wintry blasts, for forty more long years—a fit emblem of patience on a monument not "smiling at grief," but still peddling potatoes.

But who comes here, rustling in silks and laces, with jewels glittering in the sun? She stops to talk with the old market woman; she is about to purchase something, more out of a charitable feeling, perhaps, than a want of the article. No, instead of giving, she is recieving money—a large sum too—what can it mean? "Thank you, mother." Is it possible? That word explains the whole. This is the lady's daughter in her silk-velvet mantilla, that the old market-woman mother in the same old-faded camlet cloak, sitting in the same old chair which she sat in before Miss was born.

Across the street, alongside the East River, is the wholesale fish and live-poultry market. We have seen sweeter and more pleasant places for a morning walk. In fact, the whole market is most notoriously free from all appearance of neatness, convenience, comfort, or adaptability to the purposes of a great mart of human food. Yet, what a motley crowd throng hither every morning for their daily provisions. Lessons of economy may be studied here advantageously. Here comes now a

woman in a tattered shawl and weather-beaten bonnet. carefully counting her scanty stock of change, studying as she walks, how to expend it to the best advantage. Let us follow silently and observe whether her skill is equal to her necessity. First she buys a coarse-grained, worthless fish, because she can get a large one for a shilling. Her next purchase is half a peck of potatoes, at the rate of a dollar and a half a bushel—the dearest food in market, unless it is the half of a half peck of turnips, at half the price of potatoes, which she next buys. The large cabbage head, at ten cents, will do but little better. How much better, how much more economical it would have been for that poor woman, who has a large family to feed, if she had purchased a soup bone of beef, or a scrag of mutton, in place of the fish; and instead of the potatoes and turnips, the same value in dry beans, or some of that sweet-looking hommony, so temptingly spread out upon the next table to that where she bought the potatoes. Yes, and at a less price per bushel than those; but she knew nothing of the economy of buying one, instead of the other, and therefore followed the course that long habit taught her, when potatoes were cheap and corn dear. As we pass up Fulton street, you will be struck with surprise at the enormous piles of baskets and brooms, which pass daily through the ordeal of buying and selling in the immediate vicinity of Fulton Market.

At some future day, we will accompany you through Washington Market, where more farm produce is bought and sold in the course of the year, than in any other provision mart in America.

AFFIDAVIT FOR W. G. AND G. W. EWING
[Ewing Papers, Indiana State Library]

[December 16, 1850]

I Solon Robinson, of the County of Lake and State of Indiana, upon my solemn affirmation do declare that I was one of the first settlers of Lake County, Indiana;

that I was for many years the agent of Messrs W. G. & G. W. Ewing, having a general superintendance of their lands, to prevent trespass & pay taxes &c.

I am well acquainted with the character & quality of all their lands known as Indian reserves in that county, none of which are above medium & some below that grade. The section that was located for O-Kee-chee, a Pottowattamie squaw, which I believe is numbered Sec. 4 in Township 37. N. of Range 7 W. is absolutely worthless, being composed of those barren hills of sand that encircle Lake Michigan, and intervening valleys of swamp or pond, skirted with a few scrubby pines & a few scattering stunted black oaks.

In the early settlement of the county, through some misapprehension of the value of this land, or through a prejudice of the assessing officers against Indian lands. a very heavy tax was assessed upon this section & before it became fully confirmed to Messrs Ewings, it had accumulated by the law of forfeiture or penalty to a large sum, not now remembered, though their vouchers will show the amount, which I advised them was more than the land was worth, and that they had better give it up. but they replied they were unwilling to have it appear upon the record that they were defaulters for taxes, & instructed me to pay the amount, which with subsequent taxes by them paid far exceeds the value of said section in fact it has no value & could not be sold for a dime an acre to any one who knew its quality. I am confident the present owners never would have bought it of the squaw if they had been informed of its character & value. I believe they depended entirely upon the expectation of

<sup>&#</sup>x27;William Griffith and George Washington Ewing, sons of Alexander Ewing, who came to Fort Wayne in 1822; began business as a firm in 1827; developed enterprises through associated firms in Fort Wayne, Peru, Logansport, and La Gro; expended stupendous energy in the fur trade, Indian trade, land speculation, politics, and grain shipping on the Wabash and Erie Canal. See "The Ewings—W. G. and G. W. Ewing," in Brice, Wallace A., History of Fort Wayne . . ., 23-28 (Fort Wayne, 1868); Ewing Papers, Indiana State Library.

buying agricultural or timbered land of fair quality, but this is neither one or the other & it must have been located by design to be worthless, or by mistake, or as many sections were, without examination by the locating agent, or else a mistake must have been made in the number of section, township or range, by which the reserve became fixed upon such a spot, as neither white man or Indian would have selected to receive or the government to give; as I cannot conceive any purpose for which it would be valuable to either. There is at this time much vacant prairie land coming within the terms of good farming land, though not at present saleable, upon which this reservation might have been located, in the same county. SOLON ROBINSON

16th December 1850.

District of Columbia Washington County to Wit:—On this 16th day of December 1850, before me, the Subscriber, a Justice of the peace, in and for Said County, personally appeared the within named John Robinson, and made Oath in due form of law, that the foregoing annexed Statements are true, to the best of his Knowledge & belief-

Sworn before

P. K. Morsell J. P.—

## THE TRAVELLER.—No. 4.

[New York American Agriculturist, 10:91-93; Mar., 1851]

[December 25, 1850]

Journey from New York to Florida.—A few notes of this journey may be interesting to readers. December 11th, I left New York on that excellent boat, the John Potter, which leaves the wharf nearest the Battery on the North River, every day at noon, and arrives at South Ambov. 30 miles, in an hour and three quarters. It takes less than fifteen minutes to transfer a load of passengers and baggage to the railroad, and in four hours and a half, I tavelled with great ease the 96 miles between New York and Philadelphia. This is an excellent road, and is well furnished with first-class engines, cars, and conductors. Fare \$3. I have heretofore spoken of the beneficial effects of this road to the agriculture of New Jersey.

December 12th, I left Philadelphia at 3 o'clock by express train for Baltimore. The distance, time, and price, is about the same as between New York and Philadelphia. Between Philadelphia and Wilmington, 30 miles, the road passes over a very valuable agricultural district, much of which being owned in England, is but poorly improved by the tenantry. A few miles after leaving Wilmington, the road penetrates a tract of country either naturally poor or made so by poor cultivation. The Susquehannah is crossed by ferry at the old town of Havre de Grace, and from thence to Baltimore the land is much of it flat, wet, cold, unproductive, and uncultivated; yet all this might be warmed into productiveness by a better system of cultivation; but this will never be while land is of so little value as at present throughout this vast country.

December 13th, I proceeded to Washington, 40 miles. Fare \$1.80, with only two or three little spots like an oasis in a desert, to relieve the eye from the painful contemplation of a worn-out country—once fertile. The wire fence erected by Col. Capron along this railroad, at Laurel Factory, still draws the attention of every observing passenger. It fulfills all the purposes anticipated in the description given in vol. 7 of the Agriculturist.¹ I believe it is the only principle upon which wire fences can be erected to give satisfaction. It stands firm through all the variations of the seasons.

The land within sight of the dome of the American capitol is about as unpromising to the eye as it is to the cultivator. It looks poor, is poor, and cultivated poorer; yet wherever the experiment of deep plowing, draining, and manuring has been tried upon this unpromising soil, it affords profitable returns. For a market gardener, no

<sup>&</sup>lt;sup>1</sup> The description appeared in the American Agriculturist, 8:255-56 (August, 1849).

place offers greater inducements, than the vicinity of Washington. Commodore Jones,1 who has a farm a few miles up the Potomac, told me that, when he commenced operations there, a few years since, it was the universal opinion of his neighbors, that he could not raise grass. But he commenced a new system with a new set of plows procured from you, turning over a deep furrow and following with a subsoil plow, the first one ever used in that vicinity, and by the use of the first lime, plaster, guano, and bone dust, together with all the manure that could be saved or manufactured, he soon had good fields of grass for hay or pasturage. Subsoil plowing not only saves land from suffering by drouth, but is almost invaluable in preventing the soil from washing away and forming deep gullies. At first, his neighbors were very shy about experimenting with any of these fertilisers. Now, it is not unusual for one man to expend \$500 for such substances, and make a large profit, too, upon the outlay.

December 17th, I passed from Washington to Richmond, 133 miles. Fare \$5. The boat leaves there at 9 o'clock, stopping at Alexandria, about 10 o'clock, passes Mt. Vernon, the resting place of him who said—"Agriculture is the most healthy, the most useful, and the most noble employment of man." It arrives at Acquia Creek, 55 miles, about one. Here we take good cars upon a railroad, which, after struggling through many difficulties, is now in very good condition; and if the owners of the lands along side of it only understood their interest, they would make it the means of improving large tracts, that now pain the eye with their barrenness. The advantages

¹ Thomas ap Catesby Jones, naval officer, born in Virginia, 1789; died at Georgetown, D. C., May 30, 1858. Commanded fleet at New Orleans during War of 1812. In command of station off California in 1840. Upon learning, from what he considered reliable sources, of war with Mexico, took possession of Monterey; was suspended for this action. Settled at Prospect Hill, Virginia, and became interested in wheat farming. Contributor to The Plow, 1852. Lamb's Biographical Dictionary of the United States, 4:452.

<sup>&</sup>lt;sup>2</sup> This quotation from George Washington was used as a motto by agricultural periodicals of that time.

of railroads to agriculture seem to be as vet but little understood. The time will come when these worn-out fields will be whitened with lime brought over this road. the product of which will furnish constant employment to the freight trains, in transporting it to market. The soil is exhausted upon the surface, but the land is not "worn out." By means of the railroad, fertilisers will improve and render much that now looks bleak and desolate, desirable for a new class of cultivators. The greatest difficulty with the present owners is, they own too much. This and the fertility of new lands in the west are the causes of so much worn-out soil in the old states. It is more immediately profitable to cut down and destroy the forest and virgin soil, than it is to save or renovate the old fields. But who would always live a border life. half civilised and half savage for the mere love of cash accumulation? But this condition of things will continue. until the west is filled up, or until our government and people by a course of education, shall disprove that foolish falacious doctrince—there is no science in agriculture.

Fifteen miles from the Potomac, we pass the town of Fredericksburg; from thence to Richmond, 63 miles, there is no town nor village of any consideration, and but few well-improved looking farms in sight. The cheapness of land, healthiness of the country, and convenience of the road, I should think, offer great inducements to immigrants from the north. The president of the road, a worthy branch of the old Virginia family of Robinsons, told me the company would transport lime at a very low rate for the purposes of improvement.

December 18th was a clear lovely day at Richmond, and the fact that stores kept open doors and small fires, will

¹ Conway Robinson, lawyer and author, born in Richmond, Virginia, September 15, 1805; died in Philadelphia, January 30, 1884. Assisted in founding the Virginia Historical and Philosophical Society, 1831. Published several volumes relating to law and also prepared some studies for the historical society. In 1836 became president of the struggling Richmond, Fredericksburg, and Potomac Railroad Company. See sketch in *Dictionary of American Biography*, 16:39.

show my northern readers a contrast to their own condition upon the same day.

Left this evening at 61% o'clock upon the Petersburg Railroad, which is now in excellent condition, and of much importance to travellers—it would be more pleasant if it connected by cars instead of stages, with the road at Richmond and Petersburg. The length is 22 miles. Fare \$1. Passengers take supper at Petersburg, and continue their journey at 9 o'clock to Weldon, 63 miles—five hours. Fare \$3. Thence to Wilmington, 160 miles, eleven hours. Fare \$5. Having driven over the same route several times, I am able to speak of it in a manner I could not do by a mere night passage. Some twenty miles south, the land is very level, sandy surface with clay subsoil, which holds the water and gives the country an appearance of sterility to which it is not entitled. These lands, if well drained and manured, and set in grass, would give more profitable returns than any corn farm in the state. understand some New-Jersey farmers are already developing their value. This railroad also offers great facilities to farmers both to improve their land by lime and in transporting produce to market. Travellers who grumble at the bad condition of the road would not do so if they knew what difficulties the company have had to encounter, and how poorly as yet they have been paid. Passengers for Raleigh leave this train about midnight, right in the woods; and those for Wilmington have to change cars at Weldon at 2 or 3 o'clock, in the open air, which, although a serious inconvenience, is far better than the old mode of staging.

Weldon is an inconsiderable village on the Roanoke, and there is one other upon the road between there and Petersburg; but from Weldon to Wilmington, there is scarcely a place of importance enough to bear that title. Nearly the whole length of this road is now in admirable order; and when it is considered that it has been built by the persevering industry and energy of the small town of Wilmington, through an almost entire wilderness, I am

disposed to give them a tribute of high praise for the great work they have done.

From Goldsboro' to Wilmington, nearly the whole produce of the country is turpentine. What a curious appearance to a stranger is presented by pines upon a turpentine place. The white sides of the trees look like so many marble monuments, when seen by a dim light through the dark forest. Forty miles of this part of the road is level and straight—the land is poor, surface water in a wet time nearly covering the whole vast extent.

Wilmington is the great emporium of America for pitch-pine lumber and turpentine. It is situated upon the side of a very sandy hill, 30 miles above the mouth of Cape-Fear River. Here we take steamers for Charleston, 180 miles. Fare \$5—time 17 hours. There are some valuable rice plantations upon this river. Dr. Hill, whom I chanced to meet on the steamer going down to his plantation, told me he made 70 bushels to the acre last season, and has made 90. A railroad is now building to connect the Wilmington road with the South-Carolina roads, in order to avoid the unpleasant sea voyage to Charleston.

I arrived at Charleston December 20th—perfect balmy May morning—think of that ye men of frost and snow and December storms!

Charleston Market.—December 21st., I have just returned from viewing the abundance of green vegetables, flowers and spring-like productions for sale, and now sit writing at an open window, enjoying the luxury of such delicious weather in winter. How unfortunate it does not continue throughout the year; but the difficulties, connected with summer in South Carolina, are equal to those in winter to the inhabitants of Canada and Vermont; perhaps more so, for health is more affected. How much every one should study contentment with his own lot, striving more to improve his situation than to change it.

Small Corn Crops.—In a visit to John's Island, I find much of the corn planted last spring did not produce over five bushels to the acre. What a difference between this

and the premium crops of Kentucky, 190 bushels to the acre! Sweet potatoes did not average probably over 50 bushels to the acre, some planters barely making seed. This was owing to the drouth that almost desolated many places.

SOLON ROBINSON.

Charleston, December 25th, 1850.

### GEORGIA BURR MILLSTONES.

[New York American Agriculturist, 10:86-87; Mar., 1851]

[January 6, 1851]

ALTHOUGH this kind of stone has been known and used for a hundred years, it is like the discovery of the action of the water ram, or the well-known fertilising qualities of guano, which, though known for an equal length of time, required the spirit that actuates the present age to bring it into general use. I had often heard of it, and sometimes heard it spoken of approvingly, and at other times with doubt, and often as of little value, and for the reason it was but little known or used. Stones made of French burr blocks were brought into the state in the almost immediate vicinity of the quarry, and millers contended, and still contend, that no other material exists that is suitable for millstones, except that of France.

While at Savannah the other day, I sought the opportunity of examining this Georgia product, at the store of Messrs. Hoyt, agents of an association recently formed, called the "Lafayette Burr-Millstone Manufacturing Company," who now have some 20 or 30 hands employed, and will soon increase the number to meet the demand. The quarry is 100 miles from Savannah, and six miles from the Macon Railroad, upon the plantation of P. B. Connelly, extending over a tract of about 1,700 acres, near the line of Jefferson and Burke counties. Previous to the time the present proprietors commenced, in 1849, about a thousand pair of millstones had been made, and although many of them in a rough manner, and the blocks not so carefully selected as at present, yet, not one has

ever been known to be discarded, and generally they have been highly approved. Still, as the opinion has prevailed that nothing but French burr would make good wheat flour, this invaluable quarry has laid almost idle and worthless up to the past year or two. The quantity is inexhaustible. It is generally near the surface, but the ground is considerably broken by creeks and ravines, and the veins of grit are from six to twenty feet thick. There are excellent sites for mills, where the power of water might be used for shaping the blocks, with machinery lately invented for cutting stone.

The face of the blocks, when dressed, shows a surface quite as open as French burr, free from all loose pebbles, sand, iron nodules, and veins. In fact, the cavities when examined with a powerful magnifying glass, appear as though they were coated with an enamel of pure quartz, and present an immense number of fine, sharp-cutting edges. Years of exposure to the atmosphere present no appearance of change, and I am assured that the blocks stand fire perfectly, and that there is no difficulty in selecting them so as to form the whole stone of exactly the same quality and of equal goodness throughout the whole thickness.

The present price of millstones is about the same as French burr, but the great abundance of material and the constant increasing demand, will enable the company to supply stones or blocks at a price so much below those imported, that every American farmer has a direct interest in this American quarry. So far as my own opinion is worth in promotion of this new branch of home production, I give it most freely in favor of the Georgia burr over any other in the world. I saw many letters from millers to corroborate this opinion. I recommend the proprietors to take immediate measures to introduce these stones into all the northern states. They should establish an agency at once in New-York City, 1 not only for the

<sup>&</sup>lt;sup>1</sup> A note to the article announced: "A. B. Allen & Co. are appointed the New York agents for the above millstones, and will be pleased to answer any enquiries regarding them."

sale of the manufactured millstones, but the blocks, also, so that those now manufacturing from imported blocks may obtain a full supply of an article not only superior in quality, but less in price—one of the products of the teeming soil of America.

SOLON ROBINSON.

Macon, Georgia, Jan. 6th, 1851.

### SALT FOR CATTLE AND SHEEP.

[New York American Agriculturist, 10:63; Feb., 1851]

[January ?, 1851]

In the preface to an article under this title in your last number, you invite arguments in opposition to the doctrine therein advanced. I do not wish to present any argument against the practice; but I will give some facts which may go for what they are worth, to prove that salt is no more necessary to the brute creation, than spirituous liquor is to the human portion.

During one of the winters of my residence upon the western prairies, salt became very scarce and difficult to obtain, even at \$10 or \$12 a barrel, the price it was universally held at; and many persons who had always considered it as an article of positive necessity for cattle and sheep, were obliged to dispense with the use of it for several months. One acquaintance of mine, who is a very observing man, found his cattle required much less water than in any previous winter, and actually kept in better condition with the same feed, than during the seasons they had all the salt they desired. He came to the conclusion that cattle, when fed with an abundant supply of salt, in winter, are inclined to drink more cold water than is beneficial to their health. His cattle never wintered better than they did that year, nor were more free from disease.

During several summers, I have had cattle running upon the prairie, that never tasted salt from the time

<sup>1</sup>The article mentioned advocated the feeding of salt to cattle and sheep, citing the prevalence of the practice on the Continent, and suggesting its trial in England. *American Agriculturist*, 10:23.

they left winter quarters in the spring, until brought up again in the fall; and I never have been able to see the least difference between such, and those that had all they desired every day through the season. Certainly, better beef never was eaten than I have butchered, entirely grass fed, without salt.

I had always been very careful to salt my sheep just as much as they would eat, and considered it quite necessary to their health, until it so happened, one summer, that the biggest part of the common flock came to be owned by my neighbors, who thought as my sheep always got plenty of salt, it would be no more than neighborly to let theirs eat with them. But I thought proper to let the whole lot try the experiment of a long feed upon fresh grass, and I certainly never have had a more healthy flock than I did that year. There are several other observations I made, which have inclined me to the opinion that cattle and sheep can do without salt, just as well as wild deer. goats, and buffaloes; that the taste for salt which all animals manifest, is like some of the apparent natural tastes of numbers of the human family-more artificial than natural—more acquired than necessary.

It is a fact worthy of notice, that the Rocky-Mountain hunters who had been used to the stimulant of salt all their previous lives, and looked upon it as an actual necessary, instead of a luxury, have not only learned to do without it, but actually grow fat and enjoy better health than they did in civilised life. It is, therefore, a mooted question, whether salt is at all necessary for man or beast.

SOLON ROBINSON.

### THE TRAVELLER.—No. 5.

[New York American Agriculturist, 10:147-49; May, 1851]

[January ?, 1851]

FROM Charleston to Savannah, some 160 miles, the passage is made by very comfortable steamers in about twelve hours. Savannah is one of the best-planned towns

in the south. Its broad streets and shady squares are luxurious provisions for healthy enjoyment of city life. The position of the town is remarkable. It is upon a sandy bluff 40 feet high, and the only high point on the river in that vicinity. An immense tract of rice land is within sight; that upon the island directly in front of the city was bought up a few year ago by the corporation, to prevent the cultivation of rice so near the town on account of the supposed injury to the health of the citizens.

Savannah is a very wealthy and very enterprising place. The railroad to Macon, 190 miles, is one of the evidences of that fact; and although it passes through much comparatively poor land, its business adds greatly to the prosperity of the city. Mr. Cuyler, the president of the company, is entitled to be respectfully mentioned, not only for his politeness to me, but for his excellent management of the business of the whole concern. This is a much more pleasant route to reach Macon than the one by Augusta and Atlanta. The population of Savannah is now about 17,000. Three excellent daily papers are published with a liberal support, which indicates the elevation of the people—success to them.

The day I left Savannah, January 3d, was a beautiful sunny day, contrasting strongly with the appearance of the first freight train we met coming down, covered with snow. This railroad grade is worthy of note. It rises very regularly about two feet to the mile, for 70 miles, when it passes a slight elevation and descent to the Ogeechee River, 101 miles from Savannah, and 200 feet above. Between there and the Oronee there is a grade of 30 feet to the mile, which is the greatest on the road. The depôt

<sup>&</sup>lt;sup>1</sup> R. R. Cuyler, associated with the Georgia Central Railroad and instrumental in securing the completion of the track to Macon in 1843. Became president of this road in 1845, and of the Southwestern Railroad in 1855, retaining his office in the Central. Active in securing lower freight rates, especially on fertilizers. Martin, John H., Columbus, Georgia, 1827-1865, 160 (Columbus, Ga., 1874); Phillips, Ulrich B., A History of Transportation in the Eastern Cotton Belt to 1860, 262, 288-91, 381 (New York, 1908).

at Macon is 340 feet above the level of that at Savannah. The elevation of land above tide water determines the character of climate as much as latitude. The first hills on the route up, are seen near Macon, which is surrounded with those of moderate elevation, dotted with beautiful residences, surrounded by lovely gardens and other evidences of luxury and comfort.

Macon is a great cotton depôt. Like nearly all Georgia towns, it is built upon very broad streets, which being sandy, are not muddy though unpaved. Much of the soil of the surrounding country has been wickedly destroyed by a system of cultivation prevalent all over the south, of plowing very shallow, up and down hill, which has had the effect to send the surface all down to the rivers to extend our territory a little further into the Atlantic Ocean. The waters of all the rivers of Georgia, once so pure and limpid, have never run clear since the country has been inhabited by the whites. Probably no soil in the world has ever produced more wealth in so short a time, nor been more rapidly wasted of its native fertility, than the central portion of this state. The cheapness of land and its great fertility has been its ruin.

On the night of January 7th, I left Macon in the mail stage, for Tallahassee, 220 miles; fare \$22; time, 60 hours; roads to be imagined; taverns unimaginable; coaches, horses, and drivers to match; and taken altogether, not to be matched anywhere else upon this earth! yet, this road passes through some of the richest counties of land in the state. Many of the planters of Houston and Baker, make 1,000 to 1,200 pounds of seed cotton to the acre, or five to eight barrels of corn; cultivating about 20 acres to the hand, 15 in cotton, and five in corn, besides potatoes and oats, both of which grow remarkably well. Much of the land is a rich loam containing abundance of lime, and generally level.

It was my intention to stop at Albany a few days, and if any of my friends in that county regret that I did not, they may be assured it was not from any want of dis-

position; but because the "hotel" of that fine-growing town is such an abominable nuisance, that I did not feel as though I could endure it until I made the acquaintance of some kind friend, whom I doubt not would readily take pity upon a traveller unfortunately located in such an uncomfortable place, as soon as informed of his deplorable condition. Although much in need of rest, I felt compelled to proceed. One meal was all I could endure. Thus much by way of explanation. This part of the state is very new, having been mostly settled since the Creek war of 1836. Steamers run upon Flint River, in high water and carry out the cotton to Apalachicola. greatest objection to the country is limestone water and muddy soil. There are yet vast tracts of land in forest in this part of the state, though much of it is of secondary quality.

As we approach Florida, the surface becomes undulating, and around Tallahassee, it is really hilly, and elevated several hundred feet above the level of the ocean. Much of the land in Middle Florida is of a dark-red color. composed of sand, clay, lime, and iron, and having an unctuous feel as though it contained fatty matter. It is the finest red land in America, and as well worthy the attention of imigrants as any region of country I know of, taking into account its fertility, cheapness, and warm climate; and for one so far south, undoubtedly very healthy. It is a soil easily washed away when only plowed about an inch and a half deep; but as it is in places 20 or 30 feet to the bottom, it will be more than the present generation of land destroyers can do to utterly ruin the whole country. Besides, by a good system of sidehill ditching, such as has been adopted by colonel Williams,1

<sup>&</sup>lt;sup>1</sup>Colonel Robert White Williams, prominent planter of Leon County. Went to Florida as a surveyor-general when the first land office was opened at Pensacola. Later moved with the land office to Tallahassee. Became agent and attorney for General Lafayette in 1832; this relation was maintained by the latter's heirs. In this capacity, disposed of the Florida township granted to Lafayette by the United States. Took an active part in various territorial and

with level cultivation, the fertility of the land may be maintained forever. Even deep plowing, that is, plowing with two light mules only, and subsoiling with a common bull-tongue plow, with one mule, as lately practiced by Major Ward. so mellows the land and gives such an opportunity for the water to soak into it, that the washing is nearly all prevented. By a good system of cultivation, the land never can be worn out, and in time, would become one of the garden spots of the earth. It is anything but that now. The average quantity of land tilled to the hand, is twelve acres of cotton and eight acres of corn. besides, oats, rve, and potatoes. The average yield is probably something over 600 pounds of seed cotton to the acre, or about six bales to the hand, as it does not turn out quite one third the weight in clean cotton. The average yield of corn is not over fifteen bushels, some say not over ten, to the acre. Corn is liable to a disease here, called "Frenching," that is new to me. It is only affected in small sections of the field; when about half grown, it withers and turns white, and never comes to maturity. The cause is unknown. Most planters make sufficient corn for food and feed, but do not make pork for the people. That comes from New York or New Orleans. Cattle and sheep are plenty, and just as mean as could be desired. They are worthless to a cotton planter, causing him to build a great deal of fence and affording no profit. There is a great deal of land besides the red land, not generally esteemed: vet, some of it that seems to be composed of

early state developments. Vice-president of the National Agricultural Society, 1841-1842. Died, 1864. Letter from Kathryn T. Abbey, Florida State College for Women, to Herbert A. Kellar, May 16, 1936.

<sup>&</sup>lt;sup>1</sup> Major George T. Ward, prominent lawyer and Whig politician of Leon County. Member of the Constitutional Convention of 1838 at St. Joseph. Territorial delegate to Congress, 1841, 1843. As a member of the Secession Convention in 1861, led the fight against immediate and separate state action, but signed the Ordinance of Secession. Became a colonel in the 2nd Florida Infantry and was killed in action at Williamsburg, May 5, 1862. *Ibid*.

sand produces wonderfully. The natural growth of timber on the sandy land is mostly long-leaved pine. On the red lands and creek bottoms, white oak, red oak, live oak, water oak, magnolia, beech, maple, ash, sassafras, dogwood, cherry, sweet gum, long and short-leaved pine, and some other kinds, perhaps. The country, like all other limestone countries, is not well watered. There are but few mill sites, and stock water in many places is scarce. One singular feature of the country is, full-sized rivers rise suddenly out of some cavern of the earth, and lakes and streams in other places send their waters down into the earth. Wells are frequently hard to obtain, and vet people will not learn that cisterns are better and cheaper, particularly in the red land, which is of such a firm nature that no brick work is needed; the hydraulic cement may be plastered right upon the earth.

Middle Florida, particularly in the vicinity of Tallahassee, was settled by a high-bred class of inhabitants, which makes society there very agreeable, and, notwithstanding they are real land destroyers, they are money makers. Nearly all the land is plowed with very small one-horse plows, either home-made or from the manufactory of A. B. Allen & Co., New York.¹ The majority of mules are the very meanest to be found in the United States. The advantages offered to any farmer desirous of locat-

¹ The editors added the following comment on the subject of plows and plowing: "It is not our fault that small, cheap plows are taken in preference to those of a larger size. We have shown the advantages to the south of deep plowing over and over again in the Agriculturist; and every summer, when the planters do us the favor of making their annual calls at our establishment, we verbally bring the subject up before them. Frank and intelligent gentlemen as they are, they at once acknowledge the truth of what we say; but then, they add, 'it is not quite time yet for us to change our system; deep plowing, we reckon, will come by and by;' and down goes the order again for small plows, and off their rich soil continues to travel into deep gullies and rivers! Time, however, will ultimately work a change for the better, yet not much of one, we fear, in our generation. Our successors will probably reap the harvest from the seed we are now sowing."

ing a cotton plantation are probably greater than in any other state east of the Mississippi. Improved lands can be bought from \$5 to \$10 an acre—less than the present value of a single crop. In fact, the greatest misfortune to the country is, that lands are too cheap—men will waste them when of so little value. This is the true cause of so much waste and worn-out land throughout all the cotton states. It is more profitable to destroy than to save. I have something further to say of Florida in my next.

SOLON ROBINSON.

#### THE TRAVELLER.—No. 6.

[New York American Agriculturist, 10:234-36; Aug., 1851]

[March 9?, 1851]

ONE of the most improving planters in the vicinity of Tallahasse, is Col. Robert W. Williams. His plantation, on Lake Iamonee, twelve miles north of the town, is successfully side-hill ditched, and that is more than can be said of many others. He has more improved plows and other tools, and saves more manure, oyster shells, and bones, than any other man I know of in Florida. He is laughed at by his neighbors, as a theorist, experimental book farmer, &c.; but they are glad enough to follow him in everything that is successful. It is easy now to procure good plows of the merchants, or other agricultural implements from your New-York Agricultural Warehouse; and yet, few are aware how much they are indebted to Col. Williams for what he has done in the way of introducing such things into Florida.

There are many other persons and things which I shall notice hereafter, in this "land of promise." At present, being a traveller, I must travel on, merely giving the very pleasant town and people of Quincy a passing remark. The location is about as handsome as could be desired; the surface gently undulating, sandy-loam soil, and being surrounded by deep hollows, requires no artificial grading. These hollows abound in springs and ex-

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cellent sites for the hydraulic ram. One of the staple products of this, Gadsden county, is Spanish tobacco. It is grown in several places in Florida, principally from Cuba seed, and is in high repute among cigar makers for wrappers; it is more handsomely spotted than the same article grown in Cuba. The first quality is grown exclusively upon new ground, the first year after clearing off the timber; in fact, it will not spot upon old ground, and besides, the leaf grows thicker, and not so suitable for wrappers. Not more than one acre can be planted to the hand, such is the immense labor of cultivating this crop, principally owing to the unceasing task of keeping it clear from worms. An average crop is 500 pounds, and the average price about 22 cents a pound. The second year's crop is heavier but less valuable, while the third year will not pay, on account of the great labor of keeping it free of grass. One gentleman told me he had made \$600 a year, to the hand, out of his tobacco and other crops, as the tobacco does not prevent them from raising corn, and part of a crop of cotton in connection The crop is mostly sent to New Orleans, for sale.

February 22d.—When I left Quincy, the oak trees were putting on spring foliage, and the wild jasmine filled the roads with fragrance from its beautiful flowers of gold; farmers were planting corn, and the few who ever think of such small matters, were busy putting garden seeds in the already warm earth. If Quincy could be easily approached, and had only a decently comfortable hotel, it would become a great resort for invalids during winter. From there to Chattahoochee, 22 miles, the road I found passing nearly all the way through pine woods upon a pretty level ridge, until near the river, where there was an awful hill, down which I risked my neck in a crazy old coach, and dark night, just to get an idea of the elevation of the table land behind. If the traveller expects to find the town of Chattahoochee, he will be slightly disappointed. It consists of a tavern, store, warehouse, and such other out buildings as can be crowded upon a little mound of about a quarter of an acre rising out of the overflowed swamp, serving for a ferry and steamboat landing for a great extent of country. A delightful summer residence it must be for the full enjoyment of hunting aligators, fighting mosquitos, and shaking off the ague.

It was my intention to visit Mariana, and return here to take a boat up to Columbus; but finding some ladies and gentlemen who had been waiting five days, I determined to join them upon the very first, which luckily arrived a few hours after I did. As I had no desire to risk so long a waiting upon such circumscribed limits, I hope my friends in Mariana will accept this as my excuse for not keeping my engagements.

The cotton lands upon the lower part of the Chatta-hoochee River are broad and low, and subject to inundation every year. A few miles above Flint River, on the west branch, there is one small, rocky point which is almost the only one above high water to be seen in a whole day's sailing.

February 23d was like a balmy May day; the early trees along the river as green as summer, while azalias and jasmine flowers lent a delightful fragrance to the air as we wound along the rich alluvial shores, a great portion of which are still in forest; for, notwithstanding the temptation of the rich harvests this soil yields, with little preparation and cultivation, the miasma is as abundant as any other product.

We left the low bottoms at close of day, and during the night, passed Fort Gaines and Eufaula, where the clay bank rises 160 feet, a considerable portion of it perpendicular from the water. Warehouses with unboarded sides, ten or twelve stories high [?] built in the side of these bluffs, present a singular appearance, when lighted up by the glare of half a dozen brilliant light-wood torches that are flashing a glad welcome to the approaching steamer, in the hands of that ever-joyous set of be-

ings, the negroes, whose happy and contented faces and cheerful glee, always adds a charm to a night landing upon a southern or western river.

During all the 24th, we were sailing between some of the finest plantations upon this rich river. The Oswichee Bend, formerly owned by General Hamilton, has lately been purchased, with some 280 servants, by Mr. Wright, of Cheraw, South Carolina. The price, \$140,000, is considered low. The last crop sold for \$22,000. I believe there are about 3,000 acres of land, including the hills, though a thousand acres, more or less, is not considered in sales of this kind; the number of servants and number of cotton bales produced, is the criterion of value.

Average Crops upon Bottom Lands.—Judge Mitchell,<sup>2</sup> of Columbus, whose plantation is on creek bottom land, 30 miles from that town, on the Alabama side, told me he averaged from 1844 to 1850, 2,100 pounds, (five and a quarter bales,) to the hand, making at the same time a full supply of corn and pork. As he is considered a first-rate planter, this may be taken as a full average yield of the bottom lands of this river for a series of years.

Chattahoochee Cotton Lands. — These are ranked among the best in the United States. General Abercrom-

<sup>1</sup> James Hamilton, born in Charleston, South Carolina, May 8, 1786; died at sea, November 15, 1857. State legislator, Congressman, and governor of South Carolina. Organized the Bank of Charleston. Railroad director and land speculator. Operated profitably five large rice plantations, two cotton plantations, a brickyard, and a rice mill. Champion of Texan independence. Moved to Texas in 1855. See sketch in *Dictionary of American Biography*, 8:187-88.

<sup>2</sup> Americus C. Mitchell, son of Julius C. B. Mitchell and Katherine Daniell, and grandson of John Mitchell, officer of the American Revolution, born November 18, 1819, in the section of Hancock County, Georgia, formed from Washington County. In 1836 moved with his family to Barbour County, Alabama, and settled at Glensville. Lawyer, extensive planter, and known for his cultural attainments. Married Mary Billingslea in 1841. His house, mentioned later by Robinson, was built in 1843 or 1844. Letter of Peter A. Brannon, Montgomery, Alabama, to Herbert A. Kellar, June 2, 1936.

bie1 is one of the oldest planters on the Alabama side below Columbus, having settled there in 1835; his crops may be taken as a pretty fair specimen of the capability of productiveness under ordinary cultivation. He works. now, 40 hands all told; say 30 full ones, and plants 300 acres of cotton, and 250 of corn, besides considerable quantity of oats, some wheat, potatoes, turnips, rice &c., and makes all his own meat, and a little to spare, and sells corn. His cotton has averaged, per year, 1,000 pounds in the seed, to the acre, and five bales to the hand. and six cents a pound for price. He plants corn the middle of March, in the bottom of water furrows, between four-foot beds: first running a subsoil plow. Plants cotton middle of April, four to six feet between rows. Never burns cotton and corn stalks, nor waste manure, although the land he cultivates is the very finest kind of river bottom. Says he keeps too many cattle, and is convinced that he might buy more pork with the corn consumed than it makes.

Columbus.—What traveller has ever visited this thriving, go-ahead town without feeling proud of the enterprise of his countrymen? I could not say all I might of this place, in a whole number of this paper. wealthy citizens of Columbus have dwellings out upon the hills near town, where they enjoy the fresh air, amid beautiful grounds, shade trees, shrubbery, and pleasant gardens. Among these, are Col. Chamber's,2 Dr. Wild-

<sup>1</sup> James Abercrombie, born in what was formerly Hancock County, Alabama; moved to Russell County in 1830. An officer of the Mobile and Girard Railroad in 1850. An extensive planter, owning, with his sons-in-law, eight hundred slaves. Adjutant-general, War of 1812. Died in Russell County, Alabama, 1867. Memorial Record of Alabama, 2:385-86 (Brant & Fuller, Madison, Wis., 1893).

<sup>2</sup> Colonel James M. Chambers, coeditor with Charles A. Peabody and others of The Soil of the South, an agricultural periodical. American Agriculturist, 10:133 (April, 1851). Colonel William H. Chambers, the publisher, in January, 1850, established the Southern Sentinel, a Columbus newspaper. Southern Cultivator, 9:56 (April, 1851); Martin, Columbus, Georgia, 44; The Plow, 1:61 (February, 1852).

mon's, Messrs. Hurt's,¹, Flournoy's,² Woolfolk's,³ Mitchell's, and others' of our friends and subscribers.

Mr. Charles A. Peabody, one of the editors of "The Soil of the South," the most successful strawberry culturist in the world, lives on the Alabama side about five miles from town. Several very large cotton and other mills, occupy a small portion of the immense water power of this place.

Columbus is 350 miles above Apalachicola, its natural seaport, and 200 above Chattahoochee, a passage of two days and one night. Fare, on a good boat, \$7.

March 6th.—To Barnesville, 70 miles—\$7 by stage—roads such as every traveller remembers with the same feelings the boy did the whipping, awful while it lasted—very glad its over with. Here I took good cars to Atlanta, 62 miles, upon one of the excellent railroads which abound in Georgia.

Atlanta is a sort of Jonah's-gourd city, which has grown up entirely within five years. It is at the northern terminus of the Central Railroad from Macon, 101 miles, the western terminus of the Georgia Railroad, from Augusta, 168 miles, the southern terminus of the State Railroad, from Chattanooga 138 miles, and the eastern terminus of a new road not yet quite completed to West Point to join the Alabama road. It is already a place of note, but will be more so, for it holds a few men of the right sort to make any new town go ahead rapidly. One

<sup>1</sup> Henry Hurt, a planter and slaveowner, moved to Russell County, Alabama, in 1825. He had eight children, the eldest of whom was Joel Hurt. Reed, Wallace P. (ed.), *History of Atlanta*, *Georgia*, 155 (Syracuse, N. Y., 1889).

<sup>2</sup> Thomas R. Flournoy, Columbus, Georgia, private in the Georgia Regiment of Volunteers which went to Mexico. Member of Georgia Light Infantry, Columbus. White, George, *Historical Collections of Georgia*, 115 (3d ed., New York, 1855).

<sup>3</sup> Colonel John Woolfolk.

'Charles A. Peabody was a member of the Executive Committee of the Southern Central Agricultural Association. The Plough, the Loom, and the Anvil, 6:657 (May, 1854). Contributor to the American Agriculturist, 1851. See post, 497-98.

of the most prominent of these, is R. Peters,¹ who was educated for and practised civil engineering many years, but is now one of the most improving farmers in Georgia. He has done more than any other man in this part of the state to introduce all kinds of improved stock. His favorite cattle, after a fair trial of several breeds, are the beautiful Devons. How much a new country is indebted to such men, is never fully appreciated. Mr. P. and his partners have built a very superior steam flouring mill here, which is not only a convenience, but an ornament to the place. Unfortunately, the wheat crop of '49 and '50 were so cut off they have been grinding wheat from New York for the supply of the country.

Near Atlanta, resides Mr. J. V. Jones,<sup>2</sup> who has lately become somewhat celebrated as the grower of a remarkably fine quality of upland cotton of a very long staple, upon his plantation, in Burke county. It is known as Jethro cotton, and is well worthy the attention of all planters. This part of Georgia is noted for the salubriousness of its climate. The soil around Atlanta is not

¹Richard Peters, born in Germantown, Pennsylvania, November 10, 1810; died at Atlanta, Georgia, February 6, 1889. In 1835 went to Georgia and was very successful as assistant engineer of the newly organized Georgia Railroad. Set up a stage route from Madison, Georgia, to Montgomery, Alabama, which he later changed from Montgomery to Mobile. In 1860 was elected president of the Georgia Western Railroad and after the Civil War became director of the Atlanta and West Point Railroad. Moved to Atlanta in 1856 and erected the largest flour mill south of Richmond. In 1847, established a plantation in Gordon County. Although a conservative Whig, accepted the new order when Georgia seceded, and after the Civil War became a Democrat. See sketch in Dictionary of American Biography, 14:510-11.

<sup>2</sup> James V. Jones. Interested in stock raising. Member of Committee on Stock at Agricultural Fair at Stone Mountain, 1848; ex officio secretary of the Southern Central Agricultural Association, 1851; assistant secretary of Georgia State Fair, 1851; exhibitor of cattle and sheep. Successful in growing pears in the South. Contributor to agricultural periodicals. Southern Cultivator, 6:156 (October, 1848); 9:80, 107, 157 (1851); The Plough, the Loom, and the Anvil, 6:656 (May, 1854); Raleigh North Carolina Farmer, 2:197-98 (February 15, 1847).

first quality, except for fruit. Apples are abundant. Mr. Peters is experimenting, which will be the best grass to cultivate, as that is only lacking to make it one of the very best wool-growing regions.

Stone Mountain is an object, which attracts the attention of all travellers, a few miles after leaving Atlanta, on the road to Augusta. It is an immense mass of naked granite, standing up out of the comparative level around, like the great pyramids of Egypt. It is a land mark that will endure forever. If it had been a lime rock, it would have been more valuable to the agriculturist; for all the lands along this road would be wonderfully benefitted by an application of calcareous matter. In sight of this great natural curiosity let the traveller rest.

SOLON ROBINSON.

## THE TRAVELLER.—No. 7.

[New York American Agriculturist, 10:308-9; Oct., 1851]

[March 17?, 1851]

WE took our last siesta in the shade of Stone Mountain. Let us awaken at the whistle of the locomotive, which has penetrated even into the solitude of the recesses of this granite wilderness.

It is March 10th. The morning, cool and frosty in this elevated part of Georgia—the evening delightful. Farmers and gardeners are all busy plowing and planting corn and vegetables, and preparing land for the great staple crop of the south. It is a lovely country and salubrious climate; but the green pastures and sleek, beautiful occupants of pastoral countries are not here. It is said, grass and clover does not flourish in this climate. Has it been tried upon deep-tilled, highly-manured land sufficiently to prove it will not endure the heat of summer? Grass requires deeper tillage to prepare the land than is usually given in the south. It also requires to be moist and rich. Some of the swamp lands possess both the latter requisites, and might possess the other, if the owners would

plow as some of the northern grass-growing farmers do, ten or twelve inches deep. If Georgia farmers will so prepare such land and seed it to grass and then spread, every year, over the surface, a coat of straw or coarse manure, to serve both as a shade and fertiliser, it is my opinion they can stop the transit of some of the bales of Connecticut hay, which annually find their way up this road, 200 or 300 miles into the interior of one of the best states in the Union.

Madison.—This is a lively, fine county town, 60 miles below Atlanta, on the railroad, containing about a dozen stores, good court house, tolerable fair hotel, and a general appearance of somebody alive having been about there within the last century. But that which gives it the most lively and interesting appearance, is what the town should be most proud of—the several large schools. Here are two seminaries for girls, containing nearly 300 just in that joyous period of life known as the teens. These two schools are under the patronage of the Methodist and Baptist churches, the leading sects of the country, and both are constantly exercising a rivalry which results in great benefit to the whole country.

Among the citizens of Madison are many wealthy planters, some of whom own plantations in the western states, but prefer this lovely healthy spot for a residence.

It is surprising to see how little attention is paid to growing good fruit in this part of Georgia, where the soil and climate seem so well adapted to its production. Only a few farmers seem to feel an interest in trying to improve their orchards. One of the few is General Jessup, who has a fine cottage a couple of miles out of town, where he is making efforts to have one of the best orchards the country is capable of producing. The land is

¹Brigadier General Thomas S. Jesup, an officer of the United States Army who rendered important service during the Creek Indian troubles in 1836. Knight, Lucian Lamar, Georgia's Landmarks, Memorials and Legends, 2:1028-29 (Atlanta, 1914); Heitman, Francis B. (comp.), Historical Register . . . of the United States Army, 1789-1903, vol. 1:573; vol. 2:26 (Washington, D. C., 1903).

somewhat hilly, clayey soil and gravelly—rocks, granite, and slate. Timber, oak, chestnut, pine, &c. He says he produces the best peaches in the world. No doubt they are very good, if not superlatively so. The Skuppernong grape is the only one that grows to perfection here, as well as generally throughout the south.

March 12th. Farmers are now busy planting corn. The usual stand is one stalk in a place, three and a half by four feet apart, or two stalks four by five feet, and the average yield 10 to 15 bushels to the acre. The weather is now as mild and lovely as May or June at New York.

Cotton, the staple crop here, is planted about the first of April, three by four feet apart, and yields about 600 pounds in seed, to the acre, which makes about 200 pounds of ginned cotton.

Greensborough, 20 miles below Madison, is another county town; but it has not that lively appearance, though it contains a good many gentlemen of wealth and intelligence, among which may be ranked Dr. Poullain,1 planter, merchant, and cotton manufacturer, who has lately built a very tasty residence, and is ornamenting and improving his grounds as every gentleman who has the means should do, so as to make home attractive and pleasant to every member of the family, as I believe is the case with him. Senator Dawson, who is said to be an improving planter, also resides here. One evidence of his disposition to improve, is the fact that he bought two tons of Peruvian guano last spring, to experiment with upon cotton. I very much fear, owing to the drouth the result will be such as to discourage him from continuing its application. But I hope Mr. Dawson is too good a lawver to give up his case because one witness may fail in giving him the right testimony to sustain it.

Speaking of lawyers, reminds me that some of the most improving cultivators of the soil, are gentlemen of this

<sup>&</sup>lt;sup>1</sup> Dr. T. N. Poullain of Greene County, Georgia, was a member of the Secession Convention. Knight, op. cit., 2:568.

<sup>&</sup>lt;sup>2</sup> See Robinson, 1:269n.

profession. Why? Because they are reading men. They are disposed to look to every source of information by which they can gain knowledge in the profession of farming, as well as law. One of this class is Judge Cone,¹ an attorney of this place, who, though far less interested than many other gentleman, seems to take a delight, whenever he visits New York, in strolling through your great agricultural warehouse, looking by the hour at the great improvements which have been made in all the implements of husbandry, since the day when the old clumsy wooden moldboard Carey plow used to kick his shins upon the rocky hills of Connecticut. And that is not a long age ago, for there I, too, learned the trade of plowman, by the same ill-contrived machine, and an equal amount of hard kicks.

Mr. John Cunningham,<sup>2</sup> merchant, manufacturer, and planter, is another of the gentlemen of Greensborough worthy of mention and commendation in every agricultural paper in the country, for he is one of their most active and influential friends. He says wherever these are taken and read, men improve, and the crops are increased one hundred times more than the papers cost. Mr. C. has done a great deal toward introducing improved tools among the farmers of Green county, and is constantly trying by words and example to induce them to adopt such a system of tillage as will renovate and restore to fertility the old fields that now blot the fair face of nature, and make this once rich and lovely land look like

<sup>&</sup>lt;sup>1</sup> Francis H. Cone, born September 5, 1797; died May 18, 1859. Judge of Supreme Court of Georgia and member of state legislature. Knight, op. cit., 2:359.

<sup>&</sup>lt;sup>2</sup> John Cunningham, planter. Interested in wheat culture in the South. Established a mill on the Augusta Canal with James L. Coleman, and advertised prizes for the best wheat grown in that vicinity. Offered wheat at his mill in even exchange for corn. Advocated and practiced deep tillage. Member of the Executive Committee of the Southern Central Agricultural Association. Southern Cultivator, 6:169 (November, 1848), 9:56 (April, 1851); American Agriculturist, 10:341 (November, 1851); American Farmer, 4th series, 4:412 (June, 1849).

a land of desolation, wasted by the wicked hand of some destroying power, instead of the wasteful ignorance and mismanagement of the very people who should have preserved it even unto the third and fourth generation.

There are several other gentlemen entitled to high credit for the efforts they have made to arrest this destroying process, and save this fine country from destruction.

Union Point.—This is where the road from Athens unites with the main stem, seven miles below Greensborough, 39 from Athens, and 75 miles from Augusta.

Let us rise up and look out upon this blessed March morning, so like those of lovely May with us, and as we shall find but little to interest us in looking over the country, we will hold a most social and animated discussion with these Georgia farmers on our trip up to Athens. The rapid movement of the freight train with an attached passenger car of a most dirty and uncomfortable appearance, won't prevent our conversation. It runs slow and sure. All of these pleasant conversations with the cultivators of the soil tend to improve it. At Athens we have much to see and say. Let us first take our rest. In another month I hope we shall meet again.

SOLON ROBINSON.

# THE TRAVELLER.—No. 8.

[New York American Agriculturist, 10:335-36; Nov., 1851]

[March 19?, 1851]

WE approach Athens, literally, by railroad, as mentioned in my last from Union Point; we do nothing more, for the terminus of the road is upon one hill and the town upon another, half a mile off, a deep valley and mill-stream intervening. Upon this stream are cotton and paper mills. This part of Georgia was designed by nature for a manufacturing district, and in the hands of a New England population, would be made so in a very

<sup>&</sup>lt;sup>1</sup> Reprinted in part in the Southern Cultivator, Augusta, Georgia, 9:185 (December, 1851).

short time. The country is a high, granite, hilly region, with numerous rapid, rocky streams, with a salubrious climate; while the soil, generally, is not the kind to delight a southern planter, for the reason it requires a different mode of tillage from that which they have long practiced, to the destruction of some of the most fertile spots in the state.

The whole soil of this part of the state seems to be rocks turned to dust—doomed to decay—for it is made up of decomposed granite—the color and strata of the rock and the veins of gneiss, are seen in the clay in the same position as when all was solid rock. Wherever granite rocks are found in place, there may be seen the decay still progressing.

Every body condemns the soil around Athens as poor. I grant that it is not as rich as the bottom lands of the Chattahoochee, yet it is far better than some portions of Massachusetts, which are worth a hundred dollars per acre for farming purposes. The surface of the country is very uneven, and liable to wash, and has been greatly injured in that way, and will be greatly more injured unless the system of side-hill ditching is adopted: not the little miserable affairs which have been attempted upon some farms I visited, but a most thorough and complete work, of large and strong ditches, so as completely to prevent the water from coursing down the cultivated hill-sides, as it has done ever since the country was settled by the whites.

There is a spot within the town ycleped, a botanical garden. I believe it belongs to the college—an institution of some notoriety here—and a more romantic, beautiful spot to improve is rarely seen. An expenditure of three or four thousand dollars, instead of the scanty pittance doled out to the gardener, who seems to be a man of taste, would make this garden a place for the Athenians to be proud of. There is an unfortunate lack of this kind of public spirit of improvement and beautifying towns, in nearly all of them at the south. It is not for

want of individual spirit, for that abounds and shows itself in the adornment of a great many private mansions, of which, and of a high-bred, refined population, Athens may proudly boast.

Much as the soil is decried, I found wherever it is treated to a deep cultivation, with manure, it always pays for such attention. It is the very home of peaches and most kinds of fruit. This has been demonstrated pretty well by Dr. Ward, who is a scientific gentleman, devoted to horticulture and the cultivation of fine fruits.

The natural growth of timber, which always affords some indication of the quality of soil, upon the hill land. is oak, hickory, and short leaf pine: on the bottoms, poplar, ash, gum, &c.—the whole once covered with cane. I generally make it a point in visiting places, to enter as much as possible into conversation with those who cultivate the soil, upon the best manner of improving it, and increasing their crops, with a view to obtain and impart information. I found here, one man of a class I have often met before, who insists that cast iron plows are the ruin of the land; that they turn the earth over and bury all the fertile portion so deep, nothing will grow afterwards. He fully believes the soil never should be stirred over two inches deep, and that the little, old fashioned shovel plow is the best ever invented. However, there are some of his neighbors who believe in using better tools, and it is to be hoped, that example may produce a good effect upon the next generation, if it does not upon the present one.

Cherokee Rose Hedge.—The name of this rose conveys the idea to many persons that here, in the country

¹ Malthus A. Ward went to Georgia from Salem, Massachusetts, and was elected professor of Natural History in the University of Georgia in 1831. He served for eleven years. He was curator of the botanical garden attached to the University and made it into a remarkable show place, collecting there the plants from all parts of the world. The trustees of the University gave up the garden a few years before the outbreak of the Civil War and today only a few remnants of Ward's fine work are to be seen. Letter of E. Merton Coulter to Herbert A. Kellar, May 6, 1936.

once occupied by that people, is its native home, and that it will flourish in all places of parallel latitude. It does grow and form a good fence, but is not to be depended upon. Dr. Camac¹ told me that his father's hedge was killed to the ground in the winter of 1834, and '35, but grew again from the roots. In latitude 32°, in Mississippi, it was killed the same year so it never sprouted, except here and there a stalk. Although it forms one of the most impenetrable hedges, when in vigorous growth, it would never answer to depend upon a plant for general farming purposes, which is liable to be destroyed in one night of hard frost.

In mentioning the name of the late Dr. Camac, I cannot pass it by without leaving a slight tribute to his memory, as one who was alive to the importance of working a radical change in Southern cultivation, and teaching the people that agriculture was a science, which required study and improvement of the mind to improve the soil.

The people of the south owe a debt of gratitude to this good man, for the benefits they have derived from that excellent agricultural paper, The Southern Cultivator, for he was its founder. He also introduced a variety of choice fruits around his mansion in Athens, to demonstrate to the citizens how easily they might provide themselves with such luxuries, upon a soil and climate where they already enjoyed the still greater one of health.

Improvement of the Soil in this part of the state can be best and cheapest brought about by the use of lime, and peas as a substitute for clover, with the addition of some fertilizer, such as guano, bone-dust, or phosphate of lime, and an improved system of cultivation, with im-

¹Dr. James Camak (spelled variously Comac, Camac, Camak), Athens, Georgia. Removed from Milledgeville to Athens in 1817. One of the builders and a director of the Georgia Railroad. First president of the Central Bank, and editor of the Georgia Journal. Died June 16, 1847, at the age of fifty-two. Contributor to the Farmers' Cabinet, October 15, 1843. Knight, Georgia's Landmarks, Memorials and Legends, 2:662-63; Southern Cultivator, 5:104 (July, 1847); American Agriculturist, 6:260 (August, 1847); Albany Cultivator, n. s. 4:257 (August, 1847).

proved implements. A change for the better is already going on, and when the time comes that men cannot run off to the West to get new and cheap land, in some bilious swamp, then will these granite hills be appreciated at their real value, and these old broom-straw fields and pine barrens be restored to usefulness, and covered with a healthy, happy, wealthy population.

March 18th was a day worthy of the latitude of Quebec, but the cold did not stop the corn planting. The average yield of corn is estimated at ten bushels to the acre. The average yield of cotton, about 400 pounds, in the seed. It grows very small, say about two feet high, and is planted, on most of the lands, two and a half by three feet.

Col. Billups, one of the gentlemanly planters of Athens, whose hospitality I partook of, contends that side-hill ditches will not answer the purpose here, because the rain falls in such torrents, it fills up or sweeps them all away. That was the case upon his plantation five years ago. I contend, however, that if made as they should be at first, they will neither wash away nor fill up.

Light Crops of Oats.—I had supposed this a favorable soil for oats. But I have the authority of Dr. Hull,¹ an intelligent planter, for saying that many of the fields sown do not average 500 lbs. straw and grain, all told. The probable reason is, the ground is so poor for want of manure, so shallow plowed for want of better plows, that a few days of sun exhausts all the moisture, and leaves the tender plants to struggle for life in a bed of dust, lying upon a foundation nearly as hard as brick.

Cultivation of Grass.—This is almost entirely neglected. I know the difficulty of making a hay crop in this climate, yet I cannot help thinking it may be profitably done upon many spots unfit for any other crop.

<sup>1</sup> Dr. Henry Hull, son of the Reverend Hope Hull, who settled in Athens, Georgia, in 1803, and died there October 1, 1818. Dr. Henry Hull was a successful practitioner of medicine and subsequently professor of mathematics in the state university. White, Historical Collections of Georgia, 393-94.

LETTER TO MARIAH ROBINSON

[Typewritten copy in Harry Robinson Strait Papers, Gary]

LEXINGTON GA—Sund. eve. March 23. '51

MRS. MARIAH ROBINSON-

MY DEAR WIFE.

I am sitting all alone in a great house—that of ex-Gov. Gilman¹—the family have all gone to church from which I excused myself to get a few leisure minutes to tell you where I am and that I am pretty well, though never quite clear of a slight head ache; but I have used to that. I have just finished a few stanzas to my Daughter which I hope each of them will treasure up in their memory so they may retain them even after the evening shades o'er take me.

It is now upwards of two long months since I have heard from you & it will be a week more before I can reach Charleston where I hope to get a letter. I dont know when I shall reach New York, as my master dont seem to want me to leave the south till the sun drives me away. I am getting very tired—This has been a laborious winter to me. I dont wonder they wish me to remain, for I have been of great service to them. I am so well known in this country that my name is valuable in such exciting & bitter feeling times between North and South.

I am more and more satisfied with the institution of slavery as one of the best for the negro race that could be devised, but I am fully satisfied that the opposition to it will dissolve the Union. No country was ever cursed with worse enemies than the abolitionists.

The weather is cool enough this evening to make fire

George Rockingham Gilmer, born in the Broad River District of upper Georgia, April 11, 1790; died at Lexington, Georgia, November 16, 1859. State legislator, 1818-1819, 1824. Representative to Congress, 1821-1823, 1827-1829, 1833-1835. Governor of Georgia, 1829-1831, 1837-1839. Author of Sketches of Some of the First Settlers of Upper Georgia. . . (New York, 1855; rev. ed., Americus, Ga., 1926). See sketch in Dictionary of American Biography, 7:306-7.

quite comfortable. Peach trees are shedding bloom—Corn is mostly planted. But the spring is backward. What time will you meet me in New York & how long will you stay? I shall only be able to accompany you to Philadelphia & leave you to make your visits with your friends as long as you like & shall then want you to stay with me in New York as long as you can be content to do so. I shall want you with me about three weeks as my nurse, for I intend to have another cancer cut out.

If I should go south next winter I have a great inclination to take Josephine with me, though I expect it would be an expensive sort of baggage.

If Charles & Liela will strive to perfect themselves in their studies I will give them a chance to see the world one of these days.

Believe me my Dear wife, although absent, still as I ever have been yours with sweet affection

SOLON ROBINSON.

## THE TRAVELLER.—No. 9.

[New York American Agriculturist, 10:373-74; Dec., 1851]

[March 24?, 1851]

I LEFT Athens upon one of those beautiful days of March, which awakens all nature, animate and inanimate, to the loveliness of spring. I must say I parted with many whose acquaintance I had formed during the few days I spent at Athens, as though they were old and long known friends. Designing to visit Lexington, my worthy host, Captain Wray, set me down from his carriage at the depôt, after dinner, and I went down to the station, which is about three miles from the village; but fortune favored me in finding the carriage of Governor Gilmer and his excellent lady, with whom I took a seat to their large, and, of course, hospitable mansion and little farm, immediately adjoining the town.

Lexington, Ga.—This is an old town with a look that does not give the lie to its antiquity. It is the seat of

justice of Oglethorpe county, once considered one of the best cotton growing counties in the state. But forty or fifty years of hard skinning, will bring the hide off of anything that ever fell into the hands of such hard taskers of the fertility of soil as these cotton-growing, land-destroying people. However, there have been made within the last year or two, some of the best kind of crops, upon the very spots heretofore neglected as worn out.

Ex-Governor Gilmer.—I spent a pleasant day or two with this intelligent, social specimen of southern hospitality, embodied in an intelligent gentleman, alive to the spirit and necessity of agricultural improvement. One of the favorite amusements of this gentleman has been to collect a large quantity of rare minerals, principally from the hills and mountains of Georgia. His rooms and grounds are full of matter to instruct and interest visitors, and his library is stored with a great collection of valuable works. But he has not forgotten the improvement of the soil. Here I found a field of fine grass, and a barn in which to store the hay and feed the stock. He has fully demonstrated that grass will grow in Georgia. One remarkable feature in the farming operations of Governor Gilmer is, he never grew a bale of cotton.

How to Grow Cabbage.—His plan is worthy of note. He sows the seed about the first of April, and lets it grow in the bed, long, spindling plants, until the last of July or first of August, and then sets them out in deepdug holes, well manured, when the ground is wet, covering up all the stalk except the bud, and then he is sure to have good heads for winter. The holes should be dug and well-rotted manure laid by them, so all will become soaking wet, in a shower, when the manure is hauled in with some dirt, and the roots of the plant placed on it just so high that the bud will be even with the top of the surrounding earth after the hole is filled with the soil, or other rich dirt.

Price of Land .-- Mr. Shackleford, an intelligent lawyer

of this place, who takes an interest in agricultural matters, says the average value of farming land in Oglethorpe county, is about \$8 an acre. The common selling price is \$10—the soil generally, sandy loam—rocks, granite and quartz—timber, principally oak, with hickory, pine, &c. The surface is not so uneven as it is around Athens, but still, is quite rolling.

Governor Gilmer is satisfied by the experiments which he has made, that clover and grass can be successfully cultivated in this part of the state, if it were not that cotton absorbs everything else. There is not sufficient corn and meat made for the consumption of the county. Pork and flour are both imported. Wheat is grown to a small extent, and yields, sometimes, fifteen to twenty bushels to the acre; though on an average, not more than five or six. Governor Gilmer's method of saving seed wheat, is to let a portion of the field stand until so fully ripe there is no immature seed, and then by lightly threshing, the very best is obtained.

Appropriate Border for Garden Walks.—Governor Gilmer has made use of specimens of native quartz rock, and it has only to be seen, to be appreciated above the long rows of dull-colored brick usually appropriated to that purpose.

The Cradle Rock.—Upon the Governor's farm there is a rock of perhaps a hundred tons, so nicely poised that

it can be cradled by the hand of a child.

March 23d, upon which I left Lexington, was a lovely spring day, and on my way down the railroad, with such vast tracts of old worn and wasted fields on each side, I was forcibly struck with a remark made by a stranger—"What a country this would now be if it had not been destroyed by bad cultivation."

Washington, Ga.—Having a desire to visit this place, I went down by the midnight train, 20 miles from Union Point, to Cumming Station, and spent the balance of the night in just such a tavern as unfortunately abounds all over the country, and then proceeded by stage 18 miles,

to that ancient town and seat of justice of Wilkes county. Of all the land in sight of the road, the traveller could have truly said, what a country, if it had not been wantonly and wickedly destroyed. There are a great many fine gardens in this place, well filled with excellent fruit, and ornamental shrubbery. Mr. Cleveland, an enterprising merchant and gentleman of taste, has done more, probably, than any other individual, to introduce an extensive assortment of valuable fruit. He succeeds in saving his apricots and plums from the ravages of the curculio by planting trees in hen vards, or setting coops under them at the proper time. Suitable as all this county is to produce fine fruit, there is a criminal neglect, upon the part of the planters, that they do not plant orchards sufficient to feed themselves and all their SOLON ROBINSON. people.

# LETTER TO LEILA ROBINSON [Ms. in Harry Robinson Strait Papers, Gary] CHARLESTON S. C. Apl. 13 '51.

MISS LEILA ROBINSON.

My Dear Daughter. Your letter of Feb. 1st was sent to Tallahassee & from there forwarded to me at Augusta Geo. where I recd it two weeks ago, but have had no time, or rather have not taken time to answer it, but I have sent home papers continually to let you know where I was & that is about all that is necessary for you to know; for if I am sick, which is but very seldom, you dont want to know it, and if I am dead you will know it soon enough.

I am well pleased my daughter with this letter; you have greatly improved in penmanship and composition. In both I hope you will grow still more perfect. You must study punctuation, for upon the misplacing of a comma sometimes the whole sense of a sentence is changed.

I hope while you are studying the stars you wont for-

get the earth, and above all dont forget the duty you owe vour mother. As I cannot be with her, as your oldest brother is away & your oldest sister now married, you have a double duty to perform. You must exert all the good qualities of your nature to make yourself a comfort & a blessing to her in her declining years. Above all other things Leila I hope you & Charles, now you have such a good opportunity will obtain an education. If my life & health is continued so I can earn money, I will spend it freely for that purpose. As soon as it is worth while I should like to put you both in as good schools as can be found in the country. So be industrious in your studies where you are, let it be a constant study with you to be good children, so that you will be loved by all who know you & in after life as much respected as your father.

As I have letters to write to Josephine & Sarah, besides a host of writing for the printer to do while the good people of Charleston are in church, I must be brief. I am truly your affectionate father.

SOLON ROBINSON.

#### How to Use Guano.

[Augusta Southern Cultivator, 9:70-71; May, 1851]

[April 14, 1851]

There is an article (page 35) of your present volume under this title that contains much useful information, but some error, or rather statement, that will be likely to lead experimenters with this fertilizer into error. As I have been upon the land of Mr. Newton mentioned, as well as some hundred others in Virginia and other places where guano is used very extensively, and conversed day after day upon the subject, perhaps I can give your readers some useful information. I would premise that I was acting as Agent of A. B. Allen & Co.'s New York Agricultural Warehouse, for the sale of Peruvian Guano, and consequently interested in getting all possible infor-

mation upon the subject. The residence of Mr. Newton is in Westmoreland county, Va., which lies between the Potomac and Rappahannock rivers, and I venture to say the land upon his home place was as poor an old field of pines and broom straw as can be found in the State. Before using guano, in fact, it was too much exhausted to produce a decent growth of poverty grass—the last effort of expiring fertility.

When I was there about a year since, land of this character was covered by a growth of wheat that bid fair to produce 15 or 20 bushels to the acre, while upon fields that had produced that last year, a most luxuriant crop of clover was enriching the land for another crop of wheat.

Two hundred pounds to the acre is the most usual quantity as applied in that region, and the deeper it is plowed in, the better. It must be turned under—sowing it broadcast and merely scratching it in with such plows as half the cotton planters use, will answer but a poor purpose. You say, "a very little earth between the seed and guano will prevent injury." Perhaps. And that "a dress of light soil over the guano in drills," &c., would be a proper manner to apply it; "or it may be sown in damp weather, and that rains and moisture will convey the elements of fertility into the soil from the surface."

Allow me to say you never committed a greater error. If 200 pounds were sown upon an acre during a shower in this burning climate, two hours of hot sun would dissipate the value of one half of it to the four winds of heaven, and you would manure your neighbor's crop about as much as your own. Covering it with a little dust would be but little better. The best way to apply guano to cotton or corn, in Georgia, would be to open the bed just before planting, down to the very bottom, with a double mouldboard plow, drawn by two mules, and then scatter the guano, and follow immediately with a light turning plow, throwing back the earth from one side so as to cover it completely from all possibility of

contact with the seed or young plants, or it will be just as sure to kill them as so much fire. After the seed is dropped, turn the other side of the double furrow back upon it, and you have your bed complete, with your fertilizer so well buried, immediately below the plants, its volatile particles cannot escape. If it is objected to this, that it will greatly increase the labor of preparing the ground, I have only to reply, try it well; if it will not pay abandon it. My opinion is, it will be found profitable. But take my advice, and you never will sow it upon the surface, unless you are particularly anxious to make a very fine crop of grass.

I have been often asked by planters, whether it is a durable manure. I cannot answer as to cotton, but I know it is followed on wheat land by a growth of clover that no other manure can produce at the same expense. I predict many farmers in the South will be disappointed in the results of an application of guano, because they plow so very shallow, that a long dry spell will convert the two or three inches of loose earth they have merely scratched up, into dust, and the rays of the sun will reach the guano and drive it off almost as certainly as the same cause would the strength of a bottle of spirits of camphor when the stopper was out.

I have no doubt, myself, the general use of guano will have as great an effect upon the old fields of the cotton States, as it has upon similar worthless land in Virginia. The only question now is, whether it can be profitably applied to old land, while there is still so much forest to be destroyed and new soil put into cultivation, and worn out, before men will commence a system of renovation. Many persons object to the price of guano. It is not the fault of the merchant who sells it to the planter. That which comes from Peru, is owned by the government of that country, and is shipped here and sold by their agents, generally, at about \$47 a ton of 2240 lbs. The Treasury gets about one fourth of this, the freight is \$12 to \$15, and the balance goes for commissions to

agents, and various pickings and stealings of the officials through whose hands the money has to pass. The supply upon the Islands on the coast of Peru is almost inexhaustable, and if there was a free trade in the article, every farmer would find it the cheapest manure he could use. As it is, I would earnestly recommend every planter, who knows the value of manure upon his land, to try the experiment faithfully upon cotton, and see if he cannot make it profitable If any of my acquaintances desire to give an order through me, or to Messrs. ALLENS, 189, Water st., New York, I will assure them the genuine article.

I have to notice one more item in the article to which I have alluded. The writer says:—"When corn or cotton is hoed the first time, guano may be applied near the plants to be nourished, and covered by the hoe, cultivator, plow or scraper." So it may, but take care of the word near, or your careless negroes will come very near killing the whole crop. The only way I have ever seen it applied to the growing crop to good advantage, is to bar off with a good sized turning plow—such, for example, as Allen's No. 14. or A. 1—as close to the corn as you can run, and as deep as a good mule can pull it. In the bottom of this furrow, drill the guano at the rate of 200 lbs, to the acre, and turn a heavy furrow right back upon it at once. I have little doubt an application in this way, if followed by rain, would be found equal to any other method.

If any further information I happen to possess, will be of service to your readers, let them ask, and they shall receive.

> I am, most respectfully, &c., Solon Robinson.

Charleston, S. C., April 14, 1851.

LETTER TO LEILA ROBINSON
[Ms. in Harry Robinson Strait Papers, Gary]
NEAR RICHMOND VA. Sunday April 27th 1851.

MISS LEILA ROBINSON.

MY DEAR LITTLE DAUGHTER.

Your letter of the 9 & 11<sup>th</sup> inst. I found in the post office on my arrival two days since in Richmond. It is not so well written or composed as the previous one. This is in consequence of a little carelessness of yours. Capital letters are used to words where they should not be & single words are marked as though quoted that have no important mark of distinction to show why they should be marked as quoted. Your punctuation is also eroneous. I wish I could be with you to teach you some of these things that your school teachers never seem to think of.

I expected to have been in New York before now, but business still detains me & perhaps will for three weeks more—I hope not longer, for I am so tired—so anxious to get a chance to unpack my trunk once more & feel as though I could stop at least a week in one place. As soon as I get there I shall write to mother exactly how, where & when she is to come & all about it exactly, and she need have no thought about money for I shall provide her with all she wants to come with & use when she gets there. I had thought of sending home a trunk of clothes &c. first, but perhaps it will be better to wait until she returns. I do not think it worth while for you or Charles to accompany her-If you will both attend devotedly to your school, you shall both have an opportunity to see New York if I live long enough—and perhaps sooner than you expect.

I am sorry my letters give you so little satisfaction. I have sent *packages* because I could not write long letters, for I had neither time or matter to write about.

Sometimes when I am tired with business & want a little relaxation, as you want a game of romp when tired

#### A MONTHLY CHRONICLE OF RURAL AFFAIRS.

"He who by the plow would thrive, Himself must either hold or drive."

VOL. I. NEW YORK, JANUARY, 1852.

NO. 1.

Solon Robinson, Editor.

C. M. SANDON, Publisher.

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TERMS OF ADVERTISING IN THE PLOTY.



with study or work, I write poetry. It is my play, almost my only amusement. Sometimes I address my lines to some Julia or Jessie or Mary, and sometimes to some ideal personage that never existed except in the creation of my muse. It is not likely I shall ever suffer any serious inconvenience from falling in love with the substance or shadow of either. I sent a paper from Charleston containing some poetry of a diferent order—an address from the South to the North. I hope you will get & read & approve it.

I am very sorry to hear of your cousin's sickness. She is fully sensible I hope, not only by what I have said but written to her that I remember her most affectionately. How I wish I was under the same roof to day, that you might vie with each other in seeing which should love me most sweetly.

You can have no idea how much I pine after the warm affection so congenial to my nature, that I never meet with away from home. There is a sweet girl in the house where I am spending the day, but what is her sweetness to me since I cannot taste it? My life that I am leading is not certainly such an one as I would choose, but what else can I do? I have no idea I should have been alive now if I had remained at Crown Point. I doubt whether I shall ever be able to spend another winter there, if I do anywhere north of Charleston.

You speak as though your mother repines at my absence as though it were voluntary or because it is more pleasant to me thus to be separated from her and my children. If she says she would like to hear me say I calculate to stay at home in future, I should likely only gratify her at the expense of a separation more final than the present one. The charms of home are as strong for me as any living being, but not strong enough to induce me to give up the enjoyment of such health as I have been favored with for two or three years, to suffer such torments as I did several years before I left home.

Besides I am with people who appreciate me for the

talents & good qualities I possess, instead of hating, despising & cursing me because nature has endowed me superior to themselves. I do not think I could endure the envy, jealousness & hatred of some of the malicious dispositions of Lake county, after breathing a different atmosphere so long as I have. So I cannot talk of remaining at home until that home is in some other location. And I do not yet see the way quite clear to change it, though perhaps I shall in a very short time.

It certainly is not because I do not love my home that I remain away. But I cannot sit down & suck my claws like a bear, & I am not quite ready to die yet—I can earn more money away in one year than at home in five, but I am heartily tired of travelling. I feel as though I was doomed never to find a resting place. I am a sort of wandering Jew. I expect to die on a rail road or steam boat some day. Better there than in half the taverns I have to stop at. Bah! what places.

We have had during the past week very cold weather for this latitude, though the frost was not hard enough to kill peaches & other fruit which promises very abundant.

In answer to an inquiry upon a slip of paper in your letter about Mr. Dinwiddie¹ wanting to pay his debt to the county, I wish to say to Janna,² I want him to do with all my business exactly as though it was his own but I am of opinion that if any transfer of that kind was made it had better be of that Mills debt, though I cannot pretend

¹John W. Dinwiddie, born October 1, 1813; died April 12, 1861. Came to Lake County in 1835 or 1836 and commenced farming. Finding this unprofitable, sold his farm and went to Illinois to work on the canal. In 1844, married and returned to Lake County, where he purchased two hundred acres of land. Between 1844 and 1847 worked intermittently on his land and on the canal in Illinois. Entered business in Crown Point in 1847. In 1852 began farming on a large scale. Served as township trustee and county commissioner. Ball, Lake County, from 1834 to 1872, 294-95.

<sup>2</sup> Janna S. Holton, son of Dr. Ira Holton. Came to Lake County in December, 1844. Married Josephine, oldest daughter of Solon Robinson. Prominent as merchant, county officer, and businessman. to advise & just as Janna thinks best will satisfy me. I wish he would let me know whether he can collect money enough to pay taxes and interest on sinking fund debt or not. If he cannot I will send him some. I think that interest is about \$25 or 28\$ now, as part of the principal is paid.

I shall not hear from you again till I get to New York & perhaps shall not write again till then.

With love to each and every one, mother, brothers, sister, uncle, cousins, all I remain your most

Affectionate father

SOLON ROBINSON.

#### BENEFIT OF DEEP PLOWING.

[Augusta Southern Cultivator, 9:114; Aug., 1851<sup>1</sup>]

[May 22, 1851]

MR. EDITOR:—I have an item to communicate upon this subject. I spoke in my former letter of the excellent red lands of Florida. One of the great difficulties of cultivation of the hills of that State, as well as all the South. is the terrible destruction occasioned by awful deluges of rain that fall in such floods as are unknown to any other country. One of these terrible storms passed over Tallahassee since I left there, sweeping many an acre of the soil of the South into the Gulf of Mexico. Many hill-side ditches entirely failed, and horizontal plowing without ditches proved almost useless. Ditches, however, that were large and well made, saved the plantations from destruction. And so did deep plowing. I have just had a conversation with Major WARD, of Tallahassee, whom I saw last winter breaking up his land with a two horse plow, such for instance as Allen's No. 19, followed in every furrow with a bull-tongue as deep as one stout mule could pull it. The beneficial results of this were seen during the storm mentioned. The deep tilth of the soil seemed to absorb the water as it fell, and while adjoining lands that were plowed upon the old system were almost ruined

<sup>&</sup>lt;sup>1</sup> Reprinted from the Columbus, Georgia, Soil of the South.

for the present season by a single shower, the deep plowed part was but very little injured. This alone would be sufficient to warrant the extra amount of labor, but this is not all. Major Ward tells me that parts of his plantation which had been very much worn out by washing and cropping, have been restored to their original productiveness almost wholly by the system of deep plowing which he has been practicing for several years.

I believe you will concede that my opportunity to see the mode of cultivation of all kinds of crops and soils, in nearly all the Southern States, has been equal to that of any other individual; and should the question now be asked me, whether I would recommend deep plowing upon all Southern soils, no matter what their constituents I should say, yes, most unqualifiedly. But I would not recommend deep turning of light lands, while I have no doubt if a better description of stirring plows were used, followed by a bull tongue, coulter, or other sub-soiling plow, that the benefits would be commensurate with the increased labor in yearly crops, while the danger of losing all title to the land during the first hard shower, would be greatly lessened.

Planters upon James River, in Virginia, and upon Roanoke, in North Carolina, in several particular instances which I could name, have found it extremely profitable to plow their bottom lands with four stout horses to a turning plow, and follow that with three more to a subsoil plow, in every furrow. Some of the poorest old fields have been renovated by this process; particularly when connected with a system of manuring by lime, plaster, salt, bone dust, and guano, the whole of which, most particularly the latter, is purchased and applied to the poorest land in those States, with great profit. I do not advise cotton planters to purchase these fertilizers, only just far enough to try the experiment fairly, to see if it would be profitable. But I do advise them immediately to commence looking a little deeper beneath the surface for that quality of the soil that God must have placed

there, when he said the earth should bring forth every fruit in its season. That it may long continue to give you and your readers an abundant harvest from the soil of the South, is the most sincere wish of one, who is proud to rank himself your friend notwithstanding he is a resident upon the soil of the North. Truly, yours,

SOLON ROBINSON.

New York City, May 22, 1851.

#### A VIRGINIA PLANTATION.

[New York American Agriculturist, 10:209-10; July, 1851]

[May ?, 1851]

THOU shalt not covet, is a commandment which we should not break; yet, if any one can visit Sabine Hall, and not disobey that injunction, he is a more perfect Christian than I can pretend to be. It is one of those noble old mansions which are to be found scattered all over the tidewater region of Virginia, marking an age of wealth and refinement, that in some measure has faded away. For the ancient families have forsaken the old halls, and in many cases, house and household are known no longer in the land that was once graced by their presence.

Sabine Hall still retains its pristine grandeur, and is owned and occupied by as true a nobleman as ever welcomed a guest beneath the hospitable roof of a Virginia gentleman of the good old time. Let the traveller who happens to enjoy the pleasure of Captain Mayer's company upon the steamer Mary Washington, from Baltimore to Fredericksburg, (a very pleasant route it is too, and good boat and very accommodating officers,) ask him to point out this prominent landmark, a couple of miles below Tappahannock, on the opposite side of the river. It stands upon an elevated site, some two miles from the shore, overlooking a broad tract of rich bottom land, upon which great fields of wheat and corn are spread out in bounteous profusion. Covering the slope of the hill, im-

mediately in front, is a terraced garden of fruits and flowers, and grassy banks; and a little lower down, a full supply of esculents for the table. Here the fig ripens its luscious sweetness, and the peach gives its subacid goodness in great perfection. The carriage approach is from the rear, or rather the landward front, through a park of noble old trees, green grass, and hedges. There is one thing about this entrance which I wonder is not more common. A neat lodge stands by the outer gate, the residence of one of the house servants, and some of the children are always on hand to open and close it when passed by resident or stranger. The house itself is not extraordinary in its dimensions, nor grandeur of appearance; but it is sufficiently roomy, and is one of that class of oldtime dwellings whose walls are as substantial as the hospitality which welcomes the stranger within.

Through the centre, runs a broad hall, big enough to parade a militia company; upon the right, are two parlors large enough to entertain another; upon the left, a dining room and sitting room, and between them a heavy wain-scotted and balustered, deep-worn staircase, and a passage out upon the gallery of the wing, leading to the store rooms and kitchen. Of course, there is a gallery, or colonnade, upon the river front, for what finished southern house ever lacked this ornamental appendage?

The present proprietor, colonel Robert W. Carter, is a descendant of one of the oldest and most wealthy families in the state, and almost the only one upon the northern neck of Virginia, where the name was once great among the great names of that region.

Like many other countries which depend upon a single staple crop, this sunk into a state of unproductiveness, after its staple, tobacco, failed to remunerate the cultivator. Lands which once gave forth golden harvests, returned to a state of wooded wildness. A hundred years works wondrous changes. Old walls of extensive mansions, seen through avenues of old trees; fine old churches, dilapidated, though yet strong in their old age, speak of

what this region was, ere Washington was born, for here was his birthplace. Till within a few years, but a little of the country besides the alluvial bottoms of the Potomac or Rappahannock, such as those of Colonel Carter, were considered worth cultivating. Now, a new era is dawning upon this long-neglected, poverty-stricken portion of Virginia. Guano, lime, plaster, bone dust, and other fertilisers have been imported; better plows, and other implements used; and if ever that adage was applicable to any country, it is to this, for truly, the wilderness has been made to blossom like the rose. Not only the desert places in the forest have been renovated, but such lands as those at Sabine Hall have been made to double their products.

Taking all things into consideration, there are few more desirable sections of our great country than this one, so long neglected and almost despised on account of its poverty. Certainly, there are few places that have more of the characteristics desirable to make a comfortable home, than can be found upon the fine plantation and noble old hall of the place I have endeavored to draw such a picture of as would interest my readers.

SOLON ROBINSON.

### GOTHS AND VANDALS VS. SHADE TREES.

[New York American Agriculturist, 10:237-38; Aug., 1851]

[July ?, 1851]

Some simple readers of history suppose this class of people only existed in Europe; that they never overrun America as they did Rome, carrying the besom of destruction in their front rank wherever they march, and leaving their foot prints of fire, to show they have performed their office faithfully, of cutting down and committing to the flames every fine old tree of age and beauty they can lay their poisonous fangs upon.

I have seen within a few weeks past, in the vicinity of a great commercial town, the stumps of a hundred noble old roadside oaks that had just been cut down for no other object than the fuel, unless it was the gratification of barbaric pleasure to the Goth who ordered their destruction. I have also just been reading an article in the "Western Horticultural Review," published at Cincinnati, which designates this as the age of destruction, while speaking of the wanton wickedness of the way the Goths in the vicinity of that city are sweeping off all the glorious old trees that have beautified and adorned the hills which surround that great town, and which afforded me such cooling shades in days of Auld Lang Syne, where I used to recline with book or pencil in hand, looking down upon the busy hum below. No wonder, the writer alluded to, calls it the age of destruction, when he looks out upon those old hills during the burning days of summer, and sees them stripped of their ancient oaks by a spirit of Vandalism, that would blot out every line of beauty from the face of the earth for a little immediate gain. It was such a spirit that doomed to destruction a few months ago, one of the oldest and most beautiful spreading trees that ever lent its cooling shade to a lovely nook by the seaside, because, as the owner said, "a down-east chap offered \$15 for the confounded old thing, and I thought 'twould give us a better view, and so I let him cut it."

'Twas a noble old oak spreading wide by the sea,
Where the breezes came cooling and fresh o'er the lea,
While the dark waving foliage gave strength to the shade,
Where a thousand deep vows Indian lovers had made;
For the noble old oak spreading wide to the breeze,
Like a vet'ran hath wintered long ages 'mong trees,
And hath witnessed the fading and passing away,
Of a nation of people God doomed to decay,
While destroying the oaks that o'ershaded the lawn
Comes a nation more ruthless than the red one that's
gone.

Ruthless indeed—a perfect barbarian—who for the value of \$15, would cut down such a wide-spreading and

delightful shade tree, that might have stood another century, and during these hot July days, would afford such a delightful retreat from the brick walls that sear and scorch me as I write this denunciation of the Goths and Vandals of America.

STRAWBERRIES—THE SECRET OF GROWING THIS FRUIT SIX MONTHS CONTINUOUSLY.

[New York American Agriculturist, 10:253; Aug., 1851]

[July ?, 1851]

THIS secret has been discovered and practised by Mr. Charles F. Peabody, of Columbus, Georgia, one of the editors of the "Soil of the South," for several years, not as a theory or mere experiment, nor accidental production, but as a science—a study of time, successfully carried out for profit; for he sends his market wagon into the city loaded with this rich luxury from March till September; and last year, his vines continued to ripen fruit until Christmas.

What is the secret? our fair readers exclaim. What new variety? No other than Hovey's¹ seedling, impregnated by early scarlet, and *never manured*, but kept continually moist by artificial watering; for which purpose, he uses a garden engine.

For four years, Mr. P. cultivated the same variety in rich garden mould, manuring liberally every year, and at any time during summer could have mowed a heavy swath of green luxuriant vines, which would have made very good hay, but that was not what he wished to grow.

¹ Charles Mason Hovey, born October 26, 1810, at Cambridge, Massachusetts; died at Cambridge, September 2, 1887. Distinguished horticulturist. Edited American Gardener's Magazine and Register, which he founded with his brother in 1835. The name was changed in 1837 to The Magazine of Horticulture and Botany and all Useful Discoveries and Improvements in Rural Affairs, and became known as Hovey's Magazine. He continued as editor until 1868. Active in the Massachusetts Horticultural Society. See sketch in Dictionary of American Biography, 9:272-73.

Failing to get fruit by garden culture, he commenced the experiment which for six years has proved so eminently successful. He cleared off a strip of low land along a little rivulet, the soil of which is coarse sand and loose gravel. intermixed with clay slightly, and of course covered with forest mould, digging out the roots of a thick growth of bushes sufficiently prepared the land. The vines were then set in rows, six of Hovey and one of scarlet, and the surface has never been disturbed since by spade or hoe, except so far as going over the ground once or twice a-vear to cut out here and there a decaying vine or bunch of grass or weeds-few of which, however, in consequence of using no manure, ever make their appearance; neither do the plants run to vines, spreading all over the surface every year as they did in the garden. The whole strength seems to be exerted for the production of large rich berries to such a degree that the ground is red with fruit, not green with leaves; and this not upon a little plat, but over a field of five acres.

And does he never manure them? is undoubtedly asked by every tyro in the business of growing strawberry vines. Mr. Peabody grows roots, stems, and fruit. I repeat, he never manures, never digs the ground nor turns under the old roots to give place to new ones. In autumn, he gives a light dressing of the surface soil of the forest, and covers the ground with leaves; these remain until decayed, and serve to keep the berries clean during the long bearing season. This, and the watering every hot day when it does not rain, is the great secret of growing strawberries, not only six months, but last year he actually had them upon his table every month but two—January and February. Of course, at the north, the bearing season could not be of equal duration, but it may by greatly extended by the same course of cultivation.

SOLON.

A FARMER'S KITCKEN OF OLD TIMES IN NEW ENGLAND.
[New York American Agriculturist, 10:298-99; Oct., 1851]

[August ?, 1851]

A PICTURE of one of these scenes of comfort has lately fallen under my observation. What can be more cheerful and pleasant than the view of a farmer's kitchen, taken during the evening meal of a cool autumn day. It is a picture of the calm happiness of rural life.

The kitchen of the old farm house of New England is not the scullery, or mere cooking place of some modern houses—a dirty hole or comfortless out room, or sort of human bake oven where the cook is almost as much cooked as the food. No, it is a room perhaps 24 feet long and 16 wide, well lighted, warm, neat, and every way comfortable. Upon one side, there is a fireplace large enough to roast a whole ox, in which a great fire of logs sends up a cheerful blaze, lighting up the whole room so its brightness might be seen through the great uncurtained windows like a beacon light to the traveller as he comes down the slope of yonder hill two miles away, and makes him involuntarily thank God in anticipation, for the good things spread out upon the great table standing between the window and the fire.

Let us take note of this old-fashioned meal. At the head of the table sits a matron of some 60 summers—though in appearance there is nothing of the winter of old age about her—her dress is a gown of homespun worsted, well fortified with flannels from the same manufactory, that bid defiance to the autumn winds of a rigorous climate. She wears a cap on the head, and shoes, and stockings upon the feet that were made in pursuance of the best medical recipe ever written—"Keep the head cool and the feet dry and warm"—for the stockings are the product of busy fingers at idle moments with many housewives, and the shoes of stout leather, were made for service, and the cap is a mere ornament—a snow wreath among raven locks—and her face is the indication of health and happiness. Upon her right hand, sits the

farmer, dressed in a butternut-colored coat, blue pants, buff vest, white linen shirt—every article homemade stout boots and black silk cravat-for he has been to town, and this is his holiday suit. Below him sits Jedediah, Marvin, Abram, and Solomon, all economical names, for they can be shortened in common use to Jed. Mary, Ab, and Sol. Two of these wear the checked-woolen winter frock of New-England farmers—the others are in round jackets—they are school boys. Upon the left, sits Mary, Adeline, and Mehetabel, pictures of rural beauty and health. The eldest is "drest up;" she has been to town with father; she has a gown of "boughten stuff," around her neck is a boa of colored lamb's wool. knit by her own hands, fastened in the throat with grandmother's silver broach. The other two are in check woollen, spun, wove, colored, and made up under the same roof. Further down the table are three athletic young men, day laborers upon the farm—sons of neighboring farmers—one of whom is eveing the charms of the sweet face of Mary with an expression easily read by a good physiognomist. The group is completed by the schoolmaster, a young man with a glowing eve which speaks of an intellect that will tell upon the world some day with as much force as though he had not been obliged to obtain his education by summer labor and winter teaching. He is one of New England's rising sons. The meal is for men who toil. At one end of the table, stands a pot of ample dimensions smoking from the great oven; flanking the fireplace, of that most excellent of New-England cookeries.

## "A dish of baked beans,"

crowned with a great square piece of salt fat pork, crisped and rich. Lower down, a broad pewter platter holds the remains of the "boiled victuals" that formed the dinner—beef, pork, potatoes, cabbage, beets, and turnips—a pile that might rival a small hay cock in size and shape—a plate of rye and Indian bread, cold, and another made of rye flour are untouched; for a great loaf just drawn from

the oven, nicely browned and hot, is offered in great broken pieces to tempt the appetite to one of the richest repasts ever given to an epicure. By the side of the old lady, stands a black earthen tea pot, the contents of which are freely offered, but only accepted by two of them, as the rich new milk or hearty old cider is preferred as a beverage, morning, noon, and night, by those old-fashioned hearty laborers. We must not forget the never-failing accompaniment of the evening meal at this season of the year in New England, for 'tis New England's proudest dish, the golden pumpkin sweetest pie.

God being thanked for his great bounties after the close of this happy meal, all draw into a circle around the great fireplace. Father is finishing off an axe helve. Jed is mending a pair of boots, and one of the hired men upon the other side of the same bench is repairing a wagon harness—both use the same tools. The other two are employed, one shelling corn and the other helping Mary peal pumpkins, which are cut in slices and hung upon poles over head. This is Mary's accepted lover. Happy hearts and blessed industry. Mary, Ab, and Sol are engaged with the school master around the big table. lighted by a home-made candle; they are studying geography, writing, and arithmetic—fitting themselves for future statesmen. Mother is making a new coat for one of the boys. Ada is ironing at a side table, and Hitty is washing the supper dishes at another. There are two other members of this happy family group—the cat occupies the top of the blue-dve tub, which stands in one corner of the fireplace, and Old Bose sleeps quietly under the table. Directly, and before any sound is audible to human ear, he gets up, walks out into the long entry and gives a loud sharp bark at the outside door and stands waiting the approaching step. Soon satisfied that the new comer is a friend, he retires again to his repose, and three or four boys that look as though they might be brothers to those already described, so much are they dressed alike, enter and draw around the table with the others and the schoolmaster. These are from a neighboring farm, sons

of a widow, who have till now been so much engaged with the labors of the farm, they have been unable to attend the school in the day time, but are determined to loose none of the evening opportunities to keep along with their class. These will make honest, intelligent, industrious farmers. The old folks welcome them heartily, and the young ones are all rejoiced at their arrival. The old lady inquires why in the world their mother did not come along; and Mary, the kind-hearted Mary, is so sorry to hear that it is because Sarah is not so well, and mother is very busy getting their new clothes done so they can go to school, as soon as they finish picking apples. "John," says she, "let us hurry and get through our 'stent' and we will go over to the widow's and while I help her with her sewing, you shall read for the amusement of poor Sarah, for an hour or two." "If that is the case" says father, laying down his axe handle, "my good children, you shall go now. I will finish your work." "And Mary, my dear girl, don't go empty handed," says mother, "you know from experience how sweet little delicacies brought by friendly hands to the side of a sick bed, are to the poor invalid." "Hitty, my dear, if you have done your dishes, you must get your cards and make a few rolls, for I am quite out of grey yarn, and we must have some more stockings in the work." "Old man, don't cut that pumpkin too thick." "Ada, daughter, get a plate of doughnuts and some of those nice fall pippins and set on the table, I guess these boys can eat a few while they are cyphering. I do wonder if you have got light enough." "Sol, get another candle, I am sure such industrious boys ought to have all the light they want."

Thus, my readers, I have given you a slight outline of a farmer's home, such as it used to be, such as it might be, such as it should be always, and such as I am proud to say many an American farmer can boast of even in these degenerate days of "boughten-stuff gowns" and lack-a-daisical lounging of farmer's girls, who are miserable and tired of nothing to do. How do you like the picture? If well, imitate it. It is a happiness easily acquired.

SOLON ROBINSON.

TO THE BOARD OF COMMISSIONERS OF LAKE COUNTY. [Typewritten copy in Harry Robinson Strait Papers, Gary]

[November 11, 1851]

I would respectfully represent to you, that in the year 1837, at a time when materials and labor were excessively high & the population of the county small and poor and literally without any means to erect buildings for the accommodation of the courts & officers of the county, I erected at great expense a temporary court house which was used many years. I also erected a good and suitable building for a clerk's office which was used until the end of my term of seven years. I also furnished the court house with tables, chairs, benches etc. and bedding and other necessary articles for the jail & all the proper book cases & furniture for the clerk' office, and I never have received from the county one cent for the rent of buildings or furniture. It is true, after the office of clerk passed out of my hands, the commissioners made me an allowance for part of the furniture at a depreciated price, but nothing for its use or damage or loss & nothing for rent, although I had furnished the county with a good clerk's office for seven years, and a court house and jail for upwards of three years previous to the time I donated the use of it after that time with my other, as you must acknowledge, liberal donations to the county seat. I have always expected to be allowed a fair rent, but never pressed the matter upon the commissioners, because I knew I was owing them on account of my donation, and expected to affect my claim against that & tried to do so with the agent but failed. You then sued me and in my absence, obtained a judgement against me, which I was precluded by the technicalities of law from introducing my account, because you sued upon a bond.

But the eternal principles of justice and right should not preclude me from what is truly and fairly my due. I therefore most respectfully ask you to take this case into consideration and adjudicate upon the principles of equity. I cannot come before you to plead my cause and I therefore pray you not to heed the false tongue of my enemies who may seek to win favor by opposing this claim, thinking perhaps by robbing me they may be enabled to gain votes from those whom they may convince how great a sum they have saved the treasury by pursuing such an unfair & dishonest course.

I claim that Lake County is justly, fairly and truly indebted to me at the very lowest calculation, Two Hundred & Fifty dollars, and therefore ask, not as a favor, but as a right, that that sum shall be credited upon said judgment, and then the ballance shall be paid without further delay.

Should you refuse to allow my claim. I pray that I may be informed of the grounds for your reasons, why I am not entitled to be paid, so just, fair and reasonable a demand.

Trusting entirely to your disposition to act impartially as arbitrators in the matter as you would between man & man, I confidently submit my claim for your decision.

I am most respectfully your fellow citizen & Humble servant.

SOLON ROBINSON.

Crown Point Nov. 11. 1851.

## NEW YORK MARKETS.—No. 2.

[New York American Agriculturist, 10:364-65; Dec., 1851]

[November ?, 1851]

·do .

IN our March number, we took you with us upon a morning stroll through Fulton Market.¹ We now propose to carry you to the other end of the same street, and give you a slight view of another great bazaar, where the products of many thousand farms are concentrated upon one point, by the power of wind and steam, which move great fleets of vessels and long trains of railroad cars, freighted with food to fill the mighty mass of moving life, that must be daily fed in this great city.

<sup>&</sup>lt;sup>1</sup> Ante, 443 ff.

Your first feeling upon viewing Washington Market will be disgust at the corporate authorities of New York, for maintaining such an abomination—such a collection of old wooden sheds, as altogether go to make up, as you will suppose, a sort of temporary make-shift for a market house. Yet this make-shift policy has disgraced the city upon this spot for a quarter of a century. The ground occupied by this market is much longer than that of Fulton, and the business transacted here, will be to you utterly inconceivable. Situated as it is upon the bank of the Hudson, it is the great receiving depot of that prolific inlet of farm produce to the markets of the city and the world. This, more than any other, is a wholesale mart of provisions.

Let us step on board of the market vessels in the adjoining dock. At least a dozen large schooners from Maine and New Hampshire, loaded entirely with northern potatoes, and nearly as many more from Delaware, Maryland, Virginia and North Carolina, with cargoes of sweet ones. Here are five sloop loads of turnips, and as many more of cabbages. Of apples, we might as well estimate the sands of the sea shore, as attempt an approximation towards the quantity of this fruit daily passing through this market, to say nothing of all the other avenues by which it enters into and is sold and resold, or consumed in this great fruit emporium.

Besides all these sailing vessels, you will find all along the docks contiguous to this market, numerous steamboats and tow barges, fitted up expressly for the transportation of market produce. Upon these you will count the carcasses of beef, mutton, pork, poultry, and game by the hundreds, butter and cheese by the ton. To give you some idea of the extent of trade in the former article, we will mention that a friend of ours, in the vicinity of Washington Market, whose business is that of wholesale grocer, and not generally engaged in the produce trade, informed us that the value of butter consigned to this house for sale, would amount to \$50,000 per annum.

No description, however, which we can give, will convey an idea to the mind of one who has never visited the city, of the vastness of the quantity of food daily required to feed such a multitude as constantly dwell at this great point of concentration, and that are coming to or going from it to all parts of the world.

Immense quantities of property at this season are liable to destruction from frost. Here may be seen a thousand wagon loads of potatoes, turnips, carrots, beets, onions, cabbage, and other perishable vegetables, lying upon a few boards on the ground under open sheds, without any possible protection to prevent freezing. Upon the wharves, and all around and under the market house, and on the pavements, in front of produce stores, there are hundreds of barrels of apples, also liable to be frozen in a single night, upon a change of temperature as sudden and severe as often occurs in this climate, before they could be removed to a place of safety.

The crowded condition of this market renders its want of neatness more apparent—its want of almost every convenience, comfort, and capability, has been so long apparent to all who are acquainted with it, they have ceased to wonder at, or be disgusted with its miserable appearance. Situated as it is, with a broad front upon the river, what an ornamental, as well as useful, monument of city pride might be reared here.

The basement story should be made cool and dry in summer, and proof against frost in winter. This should be the vegetable and fruit market upon the sides of the building; the rooms under the center being dark would be used as store houses, for anything requiring an even temperature, such as butter, lard, fruit, or vegetables. The first floor should be wholly occupied for meats and their kindred substances, upon roomy stalls with broad aisles and railroad tracks between. This room should be the perfection of neatness—fitted with marble tables and Croton water; windows, and doors, wire-screened to admit air and keep out flies; lighted with gas, and kept

open for evening sales—the only time laborers can find leisure to attend—and in all things made a place of attraction, instead of loathing and disgust.

But the second floor should be the greatest scene of interest. Here, in a hall of 150 feet wide and 300 feet long, should be sold all the innumerable small articles of traffic and fine fruits, and flowers and bijouterie of the vegetable world.

The floral hall should be made a place of great attraction, by the ornaments of art as well as natural productions, and always open to every one who would bring these blessed gifts of heaven to expose for sale. Such a place would encourage the cultivation of many a waste spot, and prompt the gathering of many a wild blossom that now blooms and fades in the woods, to bring to the New York flower market; bringing with it not only comfort to those who cultivate and sell, but cheap and innocent pleasure to those who buy. A love of flowers, and a love of mischief are antagonistical to each other. Cultivate the former, and the latter will fade from the human character.

The use of the upper rooms I need not point out; except in one of them there should be a market reading-room, where the farmer in his visits to the city, for the sale of his crops could always find a much more pleasant place to spend an hour, than in the unhealthy atmosphere of some neighboring bar room.

What proud satisfaction it would be to us, as editors of an agricultural paper, if we could take our country friends—particularly the boys and girls—through such a place as we have pictured for a market house of the products grown by the toil of their constant exertions. But when we come back to the reality of those we have described, we are constrained to think them emblems of that too prevalent feeling.—Oh, anything is good enough for farmers—a feeling that will continue until farmers shall exert themselves to rise above the condition where a faulty education, or neglect to study and apply science

to their pursuits of life, has placed them in the scale of society in this country.

At some future time, in our new periodical, THE PLOW, we will take another stroll together through some of the other New York markets, and perhaps through those of some other city.

Solon Robinson.

AN OLD-FASHIONED NEW ENGLAND FARM HOUSE. [New York American Agriculturist, 10:368-69; Dec., 1851]

[November ?, 1851]

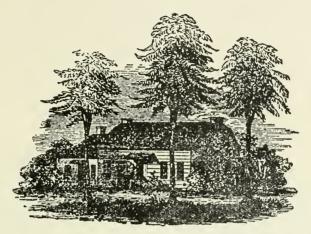
IN our last number I gave you an insight into the farmer's kitchen. Now let us walk out into the balmy air of the following morning and look at the exterior of this happy abode.

It is only one story, but the gambrel roof gives ample space in the chamber for lodging-rooms. It is 32 by 48 feet on the ground, with a projection at one end for a dairy room—an important point never lost sight of by a thriving farmer. In front there are two rooms, each 16 by 18 feet, with a front door opening into an entry between, behind which, and occupying about twelve feet square, stands the huge stone chimney, right in the center of the house. The kitchen is 16 by 24 feet, with a fire place of most ample dimensions. At one end is a bed room and pantry, at the other the chamber and cellar stairs, a bedroom and long entry to the end door, or one of common entrance. The well is within a rod of the back kitchen door, and the garden a few rods beyond.

About forty feet from the end door is the remains of the great wood-pile of last winter; for in those good old times, every New England farmer made it a point to get up wood enough in sledding time to last through the year. Two of the boys are hard at work before breakfast, preparing oven-wood. Another is feeding the hogs, and the fourth has gone after the oxen to have them ready to start into the field as soon as breakfast is over. The hired men are in the orchard saving time by saving a

few winter apples. The girls, two of them are getting breakfast, and the others are in the cow yard.

Now let us accompany *father*, who is almost as fond of his cows as his girls, and take a look at them. Certainly they are a beautiful herd, all red, with fine Devon



OLD FASHIONED FARM HOUSE

points, gentle and good milkers. Two sides of the yard are fenced with a very high stone wall, and the other two by the barn and long shed, capable of sheltering forty or fifty head of cattle. The center of the yard is a basin, which is kept constantly filled with muck, sods, weeds, and all sorts of trash capable of making manure, or saving it by absorption.

A New England Barn.—Now let us look into the most important building upon every farm. It is 40 by 60 feet and 18 feet high. This door opens into a stable 40 feet long and 14 wide, provided with stanchions, which hold the heads of the cows in winter; each one of which is so trained as to know her place, and walk up to it as orderly as the well trained horse, which occupies a box at one end of the stable. Two great folding doors open upon both sides of the barn, so that a load of hay can be driven

in from either side, and the empty cart pass out at the other. Over the stable is a tight floor, upon which there is a great mow of rye, and on the other side is the bay, filled with hay and oats from ground to peak. Old Zeph, a neighboring negro, is just clearing off the barn floor to commence the seemingly endless task of beating out all that grain with a flail. But he will do it, and then winnow in the wind, and carry it upon his back to the bins in the carriage and corn houses. And such is a picture of New England farming in old times.

SOLON ROBINSON.

# SKETCHES OF CANADA.

[The Plow, New York, 1:20-21; Jan., 1852]

[December ?, 1851]

In the American Agriculturist, several articles were given last year, descriptive of a tour of observation upon the agricultural condition of our neighbors at the north. A continuation of these notes I hope will be interesting.

I left Kingston on one of the splendid steamers of the St. Lawrence, and directly after, we were amidst the mazes of the Thousand Islands. Both shores and islands are rock-bound, and unproductive of aught but what the forest yields to the sparse population, whose log-cabin tenements are seen from our floating-palace, as we glide along by the power of steam and current, which sweeps impetuously down the numerous natural channels of this After a rapid run of 60 miles, we romantic region. emerge from the Thousand Islands at Brockville, a flourishing Canada town, the first below Kingston, containing about 3,000 inhabitants. It is situated upon the side of a rocky hill, and although it lacks that thrifty look of some of our Yankee villages, it presents a very pleasing appearance to the traveller, approaching it by water. The river here, is broad and beautiful; one little rocky isle, the last of the thousand group, standing sentinel, immediately in front of the wharves. The market, which I

always make it a point to look in upon in a strange place, did not indicate the best condition of agriculture in the vicinity.

I spent a day or two among the farms back of town, finding much of the land bedded upon a rocky foundation, only a few inches below the surface. Indeed the plow often runs upon it for many rods together. The soil seemed cold and wet, and is thickly set with that dreadful pest of Canada—the thistle.

It was the 23d of August, and farmers were in the midst of harvest and haying. The crops are spring wheat, barley, oats, buckwheat, potatoes, peas, and a little Indian corn. Hay is a leading crop, as large provision of winter forage has to be made for stock. Perhaps this does, though it should not, deter farmers from prosecuting the dairy business. On the opposite side of the river are some of the best dairy farms in the United States. The butter and cheese of Jefferson County, N. Y., are famed for their good quality, and those who make most of it are famed for accumulating wealth. The Canada farmers seem to me to be equally famed for a disposition to let their neighbors enjoy all the advantages of industry and perseverance in making money out of a cold, unpromising soil, while they sit and sigh for a republican government, under the impression that it would cure all evils, and bring wealth without labor.

The common price of cows is about \$14; butter, eight to ten cents; and cheese, not enough made to establish a price—that comes across the river. The timber is maple, birch, hickory, butternut, elm, hemlock, pine and cedar—the last in swamps. The orchards few, but well fruited. As we go back from the river, the land improves and is less rocky.

A few miles from Brockville, I visited Coleman's tannery, of 150 vats, where from 12 to 20,000 sides of

<sup>1</sup>Three brothers, Richard, David, and Abel Coleman, emigrated from Washington County, New York, to Canada in the eighteenth century. Shortly after the Revolution, Abel and Richard settled at Lyn, county of Leeds, Ontario. Abel farmed four hundred acres

leather are turned out per annum. The bark used is hemlock, and costs two dollars a cord. This employs a great many laborers, and is using up the supply so rapidly, the proprietors contemplate the necessity of removal further into the forest. The machinery of this yard is driven by water, and is all upon the labor-saving principle. The hides are mostly South American, purchased in New York, and all made into good leather, for home consumption, at twenty cents a pound. This importation is not because hides cannot be grown in Canada, but because they are not. It is not wonderful that agriculture is in a languid condition here.

It will give my readers some idea of Canada thistles, if I state to them, that in loading grain in the field, I have seen the blooms flying around the cart so thick, it was difficult to distinguish the men at a few rods distance. It fills the air like coarse flakes of snow. Grain can only be bound by using leather mittens. It grows very short, and is often mown and treated like hay. Corn is planted in June, three feet apart, each way, four or five stalks in the hill; it grows three or four feet high, and ripens in September, but is a very uncertain crop. Farm houses generally look old and dilapidated, and their occupants complain of inability to make a comfortable living, and often sigh for the more fertile regions of the west.

The village of Morristown is opposite Brockville.

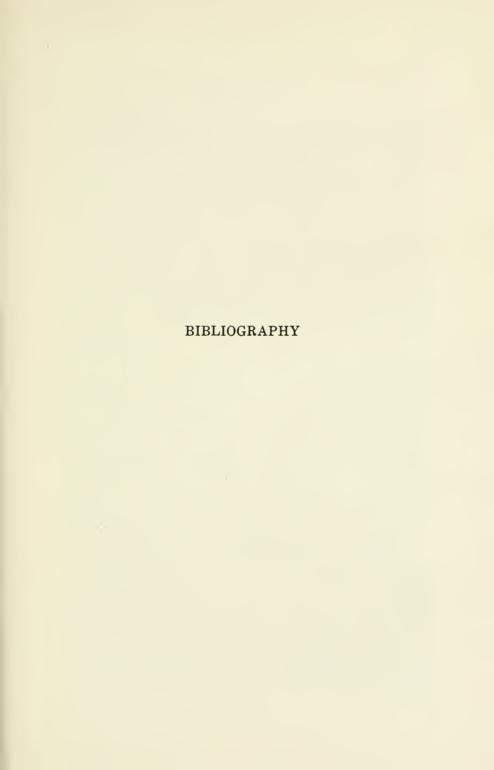
Maitland, a cold looking Canada town, of stone houses, is five miles below; the land around which has a more promising appearance for farming, and shows some fine-looking farms. Prescott, a few miles below, and opposite Ogdensburg, bears a strong contrast to that improving place. Indeed, it is not a cheerful sight, to look upon of land and conducted a tannery and gristmill at Lyn for many years. In 1853, Richard, the eldest of his ten children, was apparently proprietor of the tannery, which is listed as "Coleman R., & Co., sole leather manufacturers and millers, dealers in Spanish and Western hides, &c." Leavitt, Thad W. H., History of Leeds and Greenville, Ontario..., 100-1 (Brockville, Ontario, 1879); Mackay, Robert W. Stuart, A Supplement to the Canada Directory, 115 (Montreal, 1853).

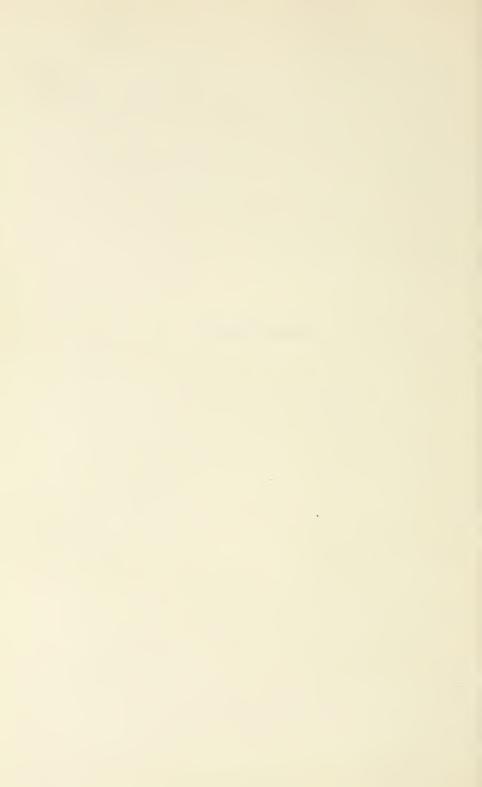
so fine a tract as that around Prescott, and see nothing to tell you that agriculture here is in a most flourishing condition. Among the few enterprising men I met with at Prescott, was Mr. S. Hurlburt, plow manufacturer; and it is a great pity there were not a great many more of the same character.

A little below this town, stand the burnt and blackened stone walls of several houses, destroyed in the Patriot war.

Before descending the boiling rapids of the St. Lawrence, to Montreal, we will stop and meditate upon the melancholy fact, that Canadian agriculture is far behind that of the States on the American side of the line.







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THE destruction of Solon Robinson's library, consisting of many thousands of volumes of Americana and the bulk of his personal papers, in the disastrous fire at Jacksonville in 1901, was not only a distinct loss to students interested in the history of American agriculture, but has also made research concerning his life and writings more difficult. The writer is under no illusion as to the completeness of the material cited concerning Robinson. Undoubtedly there is more available, which, eventually, research will make known. This is particularly true for the period 1852 to 1880, which is not represented in the selection from Robinson's writings published in the present volumes. The material listed represents merely what intermittent investigation for a period of ten years has brought to light.

No complete bibliography pertaining to Robinson is known to exist. The A. F. Knotts Collection contains reference to numerous Robinson items, and a portion of the "Tentative Bibliography of Lake County," prepared by Miss Mabel Tinkham, of the Gary Public Library, published in the Gary Evening Post in 1918, is devoted to this founder of the county. The largest single record is found in the manuscript "Bibliography of Materials Relating to Solon Robinson," assembled by William J. Hamilton in 1928. Likewise his "Bibliography of Lake, Porter, and La Porte Counties," which appeared in the History of Lake County in 1929, mentions a number of documents directly or indirectly bearing on Robinson.

As might be expected from Solon's widely separated places of residence, and frequent travels in the United States, not to mention his varied interests and capacities, information concerning his life is to be found in many localities, and in depositories both public and private.

The Connecticut State Library at Hartford, in its comprehensive collection of original documents pertaining to Connecticut local history, has preserved valuable records

about the Robinson family in the period from 1620 to 1825, including the guardianship of Solon after the death of his parents. Mrs. Albert S. Field, of Brooklyn, Connecticut, a descendant of Vine Robinson, Solon's uncle and second guardian, possesses a substantial group of original manuscripts supplementing those in the Connecticut State Library. Mr. Harry Robinson Strait, of Gary, Indiana, has a number of personal papers dealing with various periods of his grandfather's life. The Niles and Ewing manuscript collections, and the books, maps, and newspaper files in the Indiana State Library at Indianapolis, contain other data.

Mr. William J. Hamilton, while librarian of the Gary Public Library, manifested a special interest in Robinson, and the collection of books and manuscripts about Lake County which he assembled there, as well as his printed and unprinted comments on these documents, offer much useful information. Mr. A. F. Knotts, of Yankeetown, Florida, long a resident of Lake County, who for years engaged in extensive research on the early history of Northwest Indiana, and in the progress thereof became a strong protagonist of Robinson, has assembled valuable records and notes about him.

Material on the so-called "Shobonier claim" is found in the archives of the Department of the Interior, particularly in the Bureau of Indian Affairs and the Land Office. The official records of Lake County for the period 1837 to 1853, preserved in the courthouse at Crown Point, Indiana, are a mine of information concerning Robinson's activities as an official and a citizen of the county. The early portion, namely those from 1837 to 1843, are in many instances in his own hand.

Many of Robinson's published writings have been found in the extensive collection of agricultural periodicals in the United States Department of Agriculture Library and in the files of the University of Illinois and of the John Crerar Library. Additional writings are also found in the agricultural records of the McCormick Historical Association.

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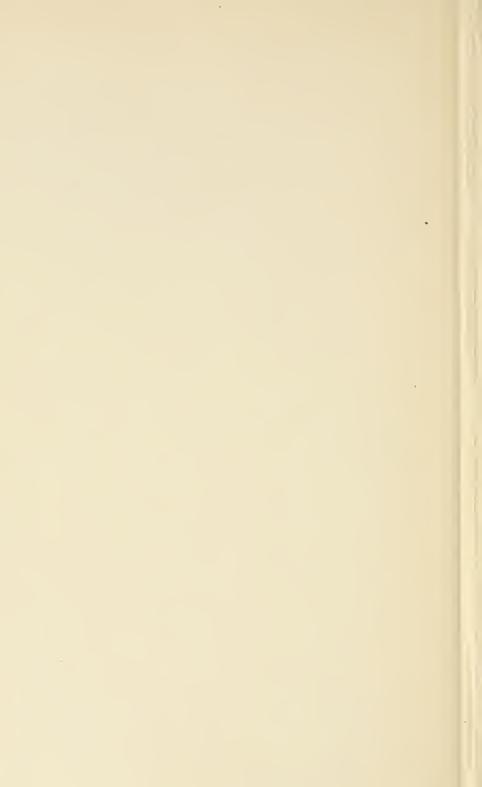
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