

The Carolina Farmer.

WILMINGTON, N. C.:
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WM. H. BERNARD, Editor and Proprietor.
R. K. BRYAN, Associate Editor.

Job Printing.

Books, Pamphlets, Circulars and Catalogues for Schools, Blanks, Posters, Hand-Bills and every other style of Printing, executed in the best manner at the office of the CAROLINA FARMER.

In connection with our Printing establishment we have a complete Book Bindery and Blank Book Manufactory.

Orders from the country promptly attended to.

ERRATA.—Last week some of our best turned periods had the starch taken out of them by our types. We will only correct one. In the last sentence of the article headed "Shall you come South?" read "could you reverence the flag of your conquerors?" instead of "joy of your conquerors."

How we may Guard against Vicissitudes in Farming.

There is no business exempt from risk. Not even agriculture the most valuable of human occupations, is free from the accidents of fortune. A rise in our farm products puts us in funds this year, and a depression next year may disappoint every calculation and produce distress. The failure of crops too will take place frequently, especially to those who do not use a proper system of husbandry. And it often happens that a farmer is prevented, by want of capital, from putting his land in the condition which his intelligence recommends, and he is made to suffer less as a consequence. In 1867 the price of cotton went down to a point that did not pay expenses, and the cotton planters saw nothing before them but ruin. A fortunate rise reinforced by their own industry restored the equilibrium, and they are now prosperous. On the other hand the wheat growers of the North and West were selling their wheat at about \$3 per bushel at the time of the greatest depression in cotton. Then indeed it seemed that they were the most fortunate of husbandmen. Now, however, wheat has fallen below the cost of production and the grain farmers are disconsolate.—What is the agriculturist to do amidst this uncertainty in regard to the future? Is he to tax his mind in trying to find out everything that is going on in the world likely to affect the price of his produce, so that he may foresee and avoid evil? Nay, that were useless. Human intelligence is not equal to the task. But there is one thing he may safely calculate on amidst all the uncertainties of the future. He may calculate safely on a home demand for a sufficiency of provisions to support himself and his family. That will afford a most excellent investment for a portion of his earnings. And when he comes to consider what disposition he shall make of any surplus gains we suggest to him that he invest them in improvements to the farm. There is comparatively no risk in such an investment. It always pays to cultivate good land. Let prices go up or down, the farmer who raises his own supplies on his own land, and keeps up and improves the fertility of his soil, is an independent man, and likely to be as free from vicissitudes of fortune, as is compatible with our condition in this life.

Cotton Seed as Animal Food.

We published in our last number an interesting article on Cotton Seed and its uses, by which it will appear that one important use of cotton seed has been to a great extent overlooked, especially here in the South where there is such an abundance of this material. Our people are paying tribute to the grass growing regions of the North for great quantities of butter and cheese, while the material out of which these valuable commodities may be made, are rotting around us in unlimited abundance! Heretofore the planter has used his cotton seed chiefly as a manure, placing it directly in the soil. But the time is coming, and is not far distant, when all this will be changed. The seed will first be hulled, then pressed, and then

returned to the planter to be used in feeding his stock. The result will be large quantities of milk, butter and cheese, while the amount of manure resulting will be equally as great and of as good quality as when the seed was applied directly to the soil. Here will be a revolution in our system of agriculture which will go far towards creating that variety of productions on our Southern farms so long desired by our most sagacious men; but found so difficult of attainment. And these things are the mere incidents of the oil manufacture. This will grow up into a large and profitable business, and will add one more to the long list of the valuable exports from the Southern country. Verily the Cotton Plant is a wonderful production of nature. It contains within itself clothing, beef, bacon, milk, butter, cheese, oil, hides, tallow, and a valuable residuum of manure. It will, probably become one of the most efficient means of solving the problem how the South may become self-sustaining in regard to provisions.

Fertilizers.

Last week we took occasion to caution farmers and planters against purchasing worthless material under the name "fertilizer." Since then we have seen some valuable articles on this subject by Professor Willet, of Mercer University, Ga., in one of which he gives analyses made by himself of a number of fertilizers, at the request of a State Inspector. One of these (the names of the manufacturers are withheld) contained 42.77 per cent of worthless matter, mostly sand! A farmer purchasing largely of this spurious fertilizer might sink in one season the entire profits of the year's operations. And if he went in debt for it and paid the usual credit price he would do worse.—The only preventive of this evil is caution. Purchasers should buy only those manures made by companies or firms of established character. It is a very easy matter to be deceived. Trumped up certificates from unknown persons are worthless. You cannot by means of the sense of smell test the value of a manure, or even the amount of ammonia which it contains.—If you buy any other than a standard manure of established reputation the chances will be against you.

Much might be done by the legislature of the State to remedy the evil of spurious manures by requiring manufacturers to brand each package with the percentage of soluble and insoluble phosphoric acid and ammonia contained in it. This is what is required by law in the State of Maine. With the appointment of an inspector of fertilizers (who should be a skilled chemist) at each point of largest commercial importance, charged with the duty of verifying analyses and exposing imposture, we see no reason why the dealings in this class of commodities might not be made as safe to the consumer as those in other articles of commerce. This is a subject of great importance. Very large sums are annually expended by agriculturists for commercial manures, and their consumption is rapidly increasing.—Not only ought the farmer and planter to be protected from frauds, but the honest manufacturers and dealers equally demand protection from the spurious articles put upon the market by unscrupulous parties.

Ground and Unground Food for Hogs.

The Maine Farmer says: "Professor Johnson the Farm Superintendent (at the Maine Industrial College) furnishes us with the following partial report of an experiment in the feeding of pigs on different kinds of food. The final statement will be looked for with interest:

"The 15th of November, four Chester pigs were weighed and put into two pens, two in each. The two in pen No. 1 weighed 93 lbs., and have been fed on whole corn. The two in pen No. 2 weighed 76 lbs., and have been fed on meal. Equal values of corn and meal have been given to each, and equal quantities of swill. December 15th they were weighed again. The two in No. 1 weighed 128 lbs., and the two in No. 2, 123 lbs.—The two fed on meal gained on the other two 12 lbs., which at 12 cents a pound would amount to \$1.44, which is more than the cost of the meal fed, and gives a net gain over the others of 24 2-7 per cent. In this experiment 54 lbs. of corn equalled 50 lbs of meal. This month the pigs in No. 1 will be fed on meal, and those in No. 2 on corn."

Small-pox is reported on the increase in New York city, and chiefly confined to the emigrant population.

Increasing.

It is gratifying to be able to inform our friends that the CAROLINA FARMER is growing rapidly in popular favor. We do not believe there has been a mail without in the past month that has not brought us new subscribers. Our agents inform us that they find no difficulty in getting subscribers whenever they make the effort; and we begin to feel that our labors will be ultimately rewarded beyond our own expectations.

Contributors to our columns on subjects connected with agriculture, horticulture, &c., are solicited. We have already a number of able contributors, and are gradually building up an agricultural literature which we trust will do much for our section of country. Our contributors will be entitled to a large share of the glory of the achievement, but our corps is not yet full, and we shall hail with pleasure the accession of new recruits.

For the Carolina Farmer.

Questions Asked.

WHITEVILLE, N. C. Dec. 27, 1869.

Messrs. Editors:—Will you or some of your subscribers be so kind as to answer a few inquiries.

1st Is it proper to use lime with animal manure in composting.

2nd. Is it proper to dissolve lime and salt in the same water at the same time or must there be two separate vessels to dissolve it for composting.

3rd. Be so kind as to mention the quantity of each of the above in composting a heap of ten one-horse cart loads of muck. Very respectfully, AURORA.

ANSWER.—To the first inquiry we answer in the negative. Animal manure contains a large amount of nitrogenous matters, and the lime has a powerful decomposing effect on these, setting free ammonia (which is very valuable) and which in this manner is lost.

To the second inquiry, we respond that the usual and most convenient manner of slacking lime with salt water is first to dissolve the salt in water, and then pour the water on the quick lime. Boards laid close together on the ground will answer to place the lime on; then pour the salt water on this until it is slacked, all lumps disappearing and the whole becoming a powdery mass.

A saturated solution of salt in water is excellent for the compost. This will be ascertained by the fact that the water refuses to dissolve any more salt, the latter sinking to the bottom. Pour on the water as long as it continues to combine with the lime; but not long enough to make the latter at all sticky, as this will prevent its even distribution in the compost heap. About one bushel of lime to a cart load of muck will answer an excellent purpose. Perhaps some of our readers may be able to give the proportions of those ingredients more exactly. If so we shall be pleased to hear from them.—EDS. FARMER.

For the Carolina Farmer.

Shell Lime.

DUPLIN CO., N. C., Jan. 18th 1870.

You or some of your many subscribers will confer a favor on a new hand at the plow by informing me through your valuable paper, which is the best way to use shell lime as a manure. I am ditching and will not have but a short time to get it ready. I am short of hand sand a new beginner, the surface soil is a dark powdery soil with a soft clay sub soil. By giving me some information on this subject you will confer a favor on one of your first subscribers and a believer in well draining, deep plowing, well manuring, and doing it yourself, or seeing that it is done right and subscribing to one or more of our Southern Agricultural Journals. Yours Truly, OLD TAR.

Shell lime should be slacked in strong salt water. The amount of water should not be sufficient to make the lime cloddy. The powdery consistence should be preserved, so as to cause it to distribute easily. This is a point of importance in the economical use of lime, as a small amount may be made in this manner to cover a considerable breadth of land. We advise broadcasting the lime at the rate of from forty to fifty bushels per acre. Put into a cart with a good tight body as much lime as it will carry. Then drive your cart horse up and down the field casting the lime from the cart tail by means of a shovel. The lime will whiten the ground so as to guide you in putting it out, and prevent liming the same ground twice. You must note carefully the number of bushels contained by your cart-body, and the breadth

of land over which your first load is cast. By computing you will then be enabled to know how much you are putting to the acre, and may diminish or increase as may be required. With a little practice you will be enabled to put the lime out evenly.

For the Carolina Farmer.

The Mangold Wurzel and the Ruta Baga.

Messrs. Editors:—From experiments made last year under most disadvantageous circumstances, I am convinced that the beet and the turnip can be raised to a great advantage in the midland section of North Carolina. Last Spring I applied a thousand pounds of Baugh's raw bone phosphate to the acre, in the drill, for Mangold Wurzel, running off the rows two and a half feet apart, following the plow with the subsoil, and then scattering the phosphates in the bottom of the furrow and covering with a one horse plow furrow on each side. The top of the ridge thus formed was raked off with a fork-hoe attached to a hand plow and the seed were planted. Last Spring was the coldest and driest within the memory of the oldest inhabitant, and the seed came up slowly and irregularly, making transplanting necessary to a stand. When warm weather came at last the beets grew off handsomely, and during the month of June they were thinned gradually to ten inches in the drill, and the "thinnings" supported four milch cows for a month. For three months after the 10th of June there was scarcely a drop of rain, and the outer leaves dried up and fell off; but the beets persevered through it, and in December we gathered from an acre two hundred and fifty bushels—not a third of what the ground would have done in a good season. The soil was a red-clay upland, cleared three years ago, and so poor that in the rows where no phosphate was put the beets were not bigger than a goose quill.

On the 22nd of July 1868, I sowed two acres in White Norfolk turnips, applying three hundred pounds of "Virginia Tobacco fertilizer" to the acre. My seed ran out before the last few rows were planted, and I supplemented with Ruta Bagas. I never saw turnips grow off better. By the end of August the field looked as if it had been sown broad-cast, though it was run off in drills two and a half feet apart. But there was a drought in September and the Norfolks stopped growing, dropped their leaves, and rotted to such an extent that only three hundred bushels were gathered. The Ruta Bagas did not rot, and made a good crop.

Last Summer I sowed an acre of Ruta Bagas, and two acres of White Norfolk. Owing to the excessive drought the former came up badly and the latter not at all, so that I gathered one hundred and fifty bushels of Ruta Bagas and none of the others. It is true, I got a stand of the Norfolk in September, but they did not grow large enough to pay for gathering.

Now to gather four hundred bushels of roots on two acres is certainly doing no big things; but it must be remembered that such a drought as that of last summer has never been known in these parts before, and may not occur again in fifty years. Had the season been favorable I am convinced the yield would have been at least four times as great. In this latitude the beet and turnip keep without difficulty in hills covered with dirt and without shelter; and a full crop of them solves the problem of milk, butter, and hog-food throughout the Winter.

Yours very respectfully,
WM. BINGHAM.

Mebanville, N. C.

Fence Law of New York.

In reply to a North Carolina correspondent (P. M. E., of Halifax,) the Country Gentleman, publishes the following information:

"According to the present laws of New York, cattle, horses, sheep, swine and goats are not allowed to run at large in the streets and highways; and the road overseers or street commissioners are required to take up any found at large, and keep them until disposed of according to law, and the owner is required to pay five dollars for each animal except sheep, for which a fine of one dollar is imposed.—Any person willfully turning another man's cattle into the highway for the purpose of injuring the owner, is liable to a fine of twenty dollars."

The success of the beet sugar factory of Fond du Lac, has been such that several other towns in Wisconsin are preparing to erect factories.

Improvement of Seed Wheat.

Hon George Geddes, in an article on the "Culture of Wheat," in a recent number of the New York Tribune, gives the following suggestions on the improvement of wheat seed. The same remarks apply with equal force to other grain crops as well:

"I am no believer in the turning of wheat into cheese or anything else; but I am a believer in clean land and entirely clean and sound seed, and thorough cultivation; and I believe that our wheat crops might be greatly improved in quality and increased in quantity by careful selection of seed. Let a farmer first determine the best variety for him to raise. At or before the time of threshing, set some sheaves on a floor, heads upward, and then draw out the most perfect heads—those of the greatest length and the best filled—until he has enough to sow an acre. Put this selected seed on land in the best condition in every respect; weed the wheat the next Spring. This acre should give him thirty or more bushels of seed for the next year. Out of this again draw the best heads, and sow an acre; and so go on for several years—the longer the better—and by-and-by he will have some seed wheat to sell that he may be willing to have bear his name, and will be a public benefactor."

Clubbing Terms.

The attention of our friends is respectfully called to the following clubbing terms with other periodicals:

FOR ONE YEAR.

- Carolina Farmer and Demorest's Ladies' Magazine, \$4.00.
- Carolina Farmer and Demorest's "Young America," \$2.75.
- Carolina Farmer and Frank Leslie's Ladies' Magazine, \$5.00.
- Carolina Farmer and Frank Leslie's Boys' and Girls' Weekly, \$4.00.
- Carolina Farmer and Peters' Musical Monthly, \$3.50.
- Carolina Farmer and Peterson's Ladies' Magazine, \$3.50.
- Carolina Farmer and The Horticulturist, \$4.00.
- Carolina Farmer and Southern Cultivator, \$3.50.
- Carolina Farmer and N. Y. Eclectic Magazine, \$5.00.
- Carolina Farmer and American Bee Journal, \$3.50.

How to Obtain a Patent.

Please inform me in your next paper how to proceed in order to obtain a patent on an article of my own invention.—How can I ascertain whether or not any like article, or similar article has ever been patented?
R. L. R.

All business with the department of patents must be conducted in writing and according to certain prescribed forms. A petition, affidavit and specification of claims must be sent to the Commissioner of Patents, accompanied by the fee for obtaining a patent, and a working model of a specified size, if it is a machine, and duplicate drawings. The Commissioner of Patents will send you a pamphlet gratuitously, giving you all the general information on the subject, if you will write to him. It must be borne in mind, however, that it is about as difficult for a person who has no experience in the business to obtain a patent as it would be to conduct a case in one of the higher courts of justice. The drawing of a specification that shall embrace all the points in the invention, and which at the same time will not include anything which has heretofore been patented, is a matter of very considerable difficulty, and requires much knowledge and experience. To ascertain whether a thing has ever been patented before, it is necessary for some person to search through all the models at the Patent Office, and to examine the printed reports of this and other countries. This will not decide the matter, as that must be left to the Commissioner or his examiners to determine officially on application. It will however enable one to form a pretty correct opinion as to whether a patent can be obtained or not, and such an examination will often save much expense in applying for a patent. It is by far the safest way to employ some competent and reliable Patent Solicitor to make a preliminary examination at the Patent Office, and if he reports favorably, to apply through him for a patent.—Prairie Farmer.

Bohemian Cotton Seed.

A Texas paper says in relation to this new variety of cotton: It matures three weeks earlier than any of the old kinds, and thus gets "out of the woods" before the worm is ready to attack it. It yields one hundred per cent. more to the acre than the old kinds. It adheres firmly to the pod when opened, and suffers little or no waste from wind. Almost every boll contains five locks. It seldom grows over three feet high, which gives full play to the sun's rays, and causes earlier maturity, and the plant is literally covered with bolls from the ground to the utmost twig."

Koskoo! The Great Blood and Liver Medicine!

Dr. Lawrence's "Woman's Friend" cures diseases peculiar to female.