

# Farmers' Gazette,

## AND CHERAW ADVERTISER.

VOLUME VII.

CHERAW, SOUTH-CAROLINA TUESDAY, MAY 27, 1842.

NUMBER 28

By M. MAC LEAN.

TERMS.—Published weekly at three dollars a year; with an addition, when not paid within three months, of twenty per cent per annum. Two new subscribers may take the paper at five dollars in advance; and ten at twenty. Four subscribers, not receiving their papers in town, may pay a year's subscription with ten dollars, in advance. A year's subscription always due in advance. Papers not discontinued to solvent subscribers in arrears. Advertisements not exceeding 16 lines inserted at one dollar the first time, and fifty cents each subsequent time. For insertions at intervals of two weeks 75 cents after the first, and a dollar if the intervals are longer. Payment due in advance for advertisements. When the number of insertions is not marked on the copy, the advertisement will be inserted, and charged till ordered out. The postage must be paid on letters to the editor on the business of the office.

### AGRICULTURAL.

#### IRON HOOPS FOR COTTON BALES.

A considerable degree of attention begins to be bestowed upon this subject.—The following encouraging view of the operation of the plan is taken from the Yazoo city paper. It is from the pen of Vincent Galloway, Esq., now a cotton factor in the city of New Orleans, but formerly a resident of this State:

"I hasten to reply to yours of the 20th inst., relative to the use of iron hoops in place of rope on cotton bales.

"As to a deduction of a dollar a bale on cotton put up in hoops, it is by no means general in this city. A respectable firm here informs me that they have received fifty cents a bale addition, on account of the iron hoops, because the cotton did not require re-pressing. A vessel left here the other day with a greater number of pounds of cotton in iron hoops than she had ever taken of re-pressed bales bound in rope; because iron bound bales keep their shape and size, and may be packed perfectly close. The mate of a ship, on being asked the other day which he preferred, said he would rather load two vessels of the same size with cotton in hoops than one in rope, because the iron bound bales keep their shape, are easier handled and jacked home."

"I agree with you that hoops will come into general use. All the planters here do to accomplish this is to use presses of sufficient power to make bales of 400 lbs. weight, 22 by 24 or 24 by 24 inches and four feet 6 or 7 inches long. This will save in the quantity of bagging and bands ten inches in the breadth of the bale and six or so in length, and last but not least, seventy-five cents a bale for re-pressing. The direct and immediate saving in expenses by using iron hoops will be about one dollar and twenty-five cents a bale!

#### STATE OF AGRICULTURE IN NORMANDY.

It is interesting to the farmer to know how the tiller of the soil in other parts of the world conducts his operations, what his course of crops and modes of culture are, what his implements and animals, and what his domestic and social condition is. With the intention of gratifying this laudable feeling, we shall give a few extracts on the agriculture of Normandy, a province of France, from a paper in the Quarterly Journal of Agriculture for June, 1841.

Normandy is a province of France, divided into five Departments, and containing about 2,700,000 inhabitants. It differs from most of the southern and eastern parts of France in many important particulars. "Instead of extensive tracts of tillage, without any visible subdivisions to make out the different ownerships, and without trees, except the formally trimmed ones on the road side, Normandy is a continued series of well timbered farms and fine forests of surpassing beauty, interspersed with corn fields of small extent, orchards and meadow or grazing land."

The soil in Normandy is considered the richest in France, in many places highly calcareous, and in general well adapted to cultivation. "The farms average about sixteen acres each in extent, and are held under leases of the usual term of nine years. But about one-half of the farms are held by the proprietors; and these proprietors are in a majority of instances farmers of the lowest class, or those who take their own produce to market, and at home live as poor as it is possible to imagine. The following extract will show what the living of the French peasant is:

"Many of this class, (the small farmers) like common laborers, dine upon a few apples or pears, and a bit of bread, without the formality of sitting down at table, and are content with a drink of their own home-made miserable cider.—It is not easy for an Englishman (or an American) to conceive how a man can work hard upon the waxy diet so general in France. We have seen men cutting up wood for fuel, (which is hard work) from morning till night, and in the severest winter season, without more nutritious food than indifferent fruit, and a little bread; the soup taken, perhaps, for supper at home, or for early breakfast, is, if possible, worse as a means of support, for it consists merely of cabbage and hot water, with a little grease or kitchen stuff; it distends the stomach with wind, and therefore is totally unsuited to a working man, who should have solid, not liquid diet."

Much cannot be said in favor of the Norman sheep husbandry, as there is little or no free range for them, and they are kept in small lots of three, four, or half a dozen, and usually tied by the legs together, even when they have lambs, a course incompatible with thrift, "and altogether a worse description of sheep cannot be imagined." Attempts are making to improve them by the introduction of the Leicester and South Down.

In the management of their cows and dairies the Normans do rather better, and the quality of their cream and butter cannot be surpassed. The cream alone is churned (not the milk as in some of the Dutch dairies,) and this operation is performed twice a week, so that the cream stands only a short time. A sweet green pasture in summer, and sainfoin hay in the winter is considered the best for butter. Beets are sometimes given pretty freely in winter, but though this food increases the milk, it does not improve the butter, and with limited exceptions, neither beets, potatoes, or turnips are given to the cows that yield the best butter. It is found by experience that "the application of dung imparts in spring time valuable qualities to dairy pasturage, but the grasses in summer give, on dunged land, a rank flavor to butter."

The Norman dairymen insist that dairy houses should have a northern aspect at all times, as a south wind is prejudicial to milk; that cream should not be left in the milk room, as they mutually exert a pernicious effect on each other; that the floor should be flagged and washed in summer, to preserve coolness; that in the winter the milk should be strained into pans as soon as possible after milking, while in the summer the cooler it can be made, the better it is for the cream. Pans of common earthenware, are preferred to any others, having been found superior even to porcelain.

"The cream is skimmed twice a day generally, sometimes three times, and care is taken always not to leave it too long on the milk. Twenty-four hours, (sometimes forty-eight,) in summer elapse before the first creaming, and the cream is allowed to lie as short a time as possible before churning. By day the cows are turned out, and at night kept in stables and supplied with sainfoin hay, which is admirable for dairy purposes."

The breed of cows most common and the most esteemed in Normandy, resemble that of Alderney, and as this province is adjacent to Alderney, Jersey and Guernsey, as well as Brittany, there is little doubt of the identity of the Alderney and Norman breeds. The Agricultural Association of Normandy have imported from England some fine short horn bulls and cows, with the intention of improving the stock of cattle. There is a Normandy or coarse hairy breed of cattle which are much used for the plow and cart, "and four or five of these bullocks or oxen, with two or three horses, make the teams which are extensively used in Normandy."

In the dairy districts the heifer calves are usually reared, while the bull calves are fattened for the market. In some places they are fattened on sk in milk, and in others on new milk; and in some districts bread, converted into a kind of pap, is added to the milk to facilitate the process. The Norman hog is of the worst possible description as to form; but when fattened the flavor of the pork particularly the bacon and hams, is good, and the meat firm.

Centuries ago, Normandy was the country from which the flower of European chivalry derived their best horses.—The breed was then large, active and powerful; but although still active and hardy, it has degenerated in size so much, that the Norman horse is now one of the smallest of European breeds. Of this we have sufficient proof in the small size and hardy character of the French Canard. They rarely attain fifteen hands in height, are short necked, have good fore legs, but frequently imperfect hind ones, but as a breed will go faster and do more work than their appearance would at first indicate. Attempts are making to improve the Norman horse by crosses with the best English blood, for the purpose of furnishing horses for the cavalry service; and one of the Government Haras, or stations for stallions provided by the Government, is located at St. Lo. At De Pin, are kept 500 horses and mares, and at St. Lo, about 120 stallions.

The French government do for the provinces, what associations or individuals among us do for agriculture; it furnishes funds for agricultural societies, plowing matches, &c. and the latter are held by authority of the state. Not long since one was held in the commune of Angerville, for which 1,000 francs were appropriated by government, and the proceedings were as follows:

"The ground being marked out by stakes at equal distances, and five judges appointed, sixteen ploughs came upon the ground: of these, fourteen had a pair of horses each, one a pair of oxen, and one a single horse. Nine of these ploughs were of the Norman form. After having plowed a field which had no particular difficulties, the teams were removed to another full of heath and broom, and the competitors were allowed the use of an additional horse or bullock. Out of the sixteen which had plowed in the free and open field, only nine appeared on the second trial. In this unbroken and rough

field many failures were soon apparent; some stopped short before they had well turned a furrow, seeing that the work was above the power of their cattle or their plows; others stood out longer but made very bad work, and two plows only overcame the difficulties under which the others failed. One of these was a new plough called the Grange plow, and the other the Dombasle plow, and to these two, and the one horse plows, the three prizes were awarded."

The Grange plow is described as having these advantages:—

"1st. It works of itself, not requiring the hand of a plowman either to enter the sock into the land, or to keep it in its true direction; a driver only is necessary.

"2d. It can be set at any depth, and turns over the furrow slices at equal and regular depth.

"3d. It moves as easily even on very sloping land as on a flat.

These effects are produced by a simple kind of mechanism, which can be applied at the expense of about twelve francs, to any common plow."

The improved Dombasle plow is the general favorite among the best French farmers. It is modelled from the Scotch plow of Small, but with the defects of that corrected, and is furnished with wheels, as is also the Grange plow.

There is in the paper alluded to a sketch of the system of farming adopted by M. du Moncel, near Cherbourg, on his farm of about 800 acres. M. M. makes potatoes the base of his system of culture, using the drill plow and horse hoe. He has tried turnips and carrots, but has rejected these for the potato, "since though the first roots are the most productive, the potato is twice as nutritive, (comparing equal bulks) besides its increased value as an article of human sustenance."

"After various experiments M. Moncel has determined on a course of eight years, divided into equal periods; in the first four years, he has successively potatoes, barley, clover, and wheat; in the second, buckwheat, colza, wheat, and oats." Of the artificial grasses he gives a preference to lucerne, though he has also vetches and red clover.—His potatoes are a large yellow, early variety, a red, and a large white for swine. He has tried some twenty kinds, but experience proved these to be the best.

A small stream passes through the yard of M. Moncel, which is made to work machinery for turning and cleaning his grain; grinding his barley, wheat, and buckwheat; converting his straw into chaff; and slicing potatoes, carrots, &c. Thus without leaving the yard, the grain is reduced to flour and bran from the sieve, and the straw cut for cattle. From this use of power, our farmers might take a useful hint, and in addition to the above operations, the same power might be made to saw the wood of a family, and crush the corn with the cob for the stock.

#### From the American Farmer.

#### IMPROVEMENT OF POOR LAND—ACCUMULATION AND APPLICATION OF MANURE.

WASHINGTON, FEB. 11th, 1842.

Mr. Editor.—In my communication I promised to give you some of my notions concerning the improvement of poor land, and shall now endeavor to fulfill my promise. The first great consideration, then, is the accumulation of manure; the next and the greater, the proper application of it. There is no farmer who pretends at all to the advancement of his interests, but can raise a good pile of manure by the opening of spring. To this end he must not sell, or carry off any thing that will contribute to the general store.—He should have a commodious stable yard, the centre of which should be at least 2 feet deeper than the out edges, his cattle should be kept during the winter in this yard, which should have proper sheds for their protection. Let all his rye, wheat, and oat straw be fed to them here, and his corn stalks, buck-wheat straw, wood's earth, leaves and every thing, that can be converted into manure, be thrown over to be trodden upon by the cattle; and at the end of every month, the whole should be thrown together in a pile; scattering a few bushels of lime over the manure, before throwing it up, will be of great service to it. If he attends carefully to these points, he will not be ashamed of his manure pile when the proper time arrives for hauling it out. One great preventive among most farmers, to the accumulation of manure, is, that they keep too much stock; a farmer should keep barely enough to convert his rough material into manure: it is a great mistake to keep cattle enough to eat up all the straw, &c. on the farm; a ton of straw placed under cattle will produce three times as much manure as if it passed through and be quite as valuable;—bed your stock well then you will do a great service to them, and increase your manure threefold.

Now comes the most important point connected with our subject, and that is, the proper application of manure.—I really believe that the want of proper attention to this matter, furnishes more impediments to the improvement of our poor land than any other course that can be imagined.—Manure, like every thing else, is perishable, and proportion as we postpone the benefits to be derived from it just in that proportion do we lose them forever. The great object then, is, to seize hold of these benefits immediately upon its application. In order to effect this, plough up the land, you propose to improve, in the fall, and harrow it down—or if it is corn land, it is already prepared. About the 1st of April; manure it broadcast, not very heavily for the great advantage in

this mode consists in bringing in the greatest quantity of land with the least amount of manure; sow immediately upon the manure, about a bushel and a peck of good oats to the acre; plough all in together with a broad plough, or light barshare; run a broad heavy brush over it, and sow immediately about a gallon of long clover seed to the acre. The benefits derived from this mode are these—you get about 30 bushels of oats to the acre, equal to ten of wheat, (which we very rarely get from poor land, even if highly manured) your young clover becomes immediately shaded by the luxuriant growth of the oats, and your land and manure from that moment receives protection, which is the great secret of improving land. By the above plan, you also get rid of that great mistake among most farmers, of ploughing in their manure too deep—instead of losing any of the benefit of this manure, you bring its whole power to bear. It is not exposed to the winter frosts, rains, and your oats and clover derive immediately benefit from it. It is a singular fact, that most farmers prefer manuring their corn land to any other; now the least reflection would or ought to convince them of the fallacy of such a course, or else they must deny, that manure loses any of its good qualities by exposure to the sun and atmosphere; for certainly in tending the crop of corn, he must necessarily turn up more than once the manure and expose it to evaporation. And although this is the last crop upon which manure should be used, yet putting it upon ground in the fall is almost equally erroneous; for it is as little beneficial to manure to expose it to the frost and rains of winter, as to the summer. Some prefer putting all their manure on their potato crop, but this, though profitable, perhaps in one sense, is a poor way to improve land, for potatoes is a crop that requires a very heavy manuring, if planted on poor land, (which we must take for granted, as we are now treating of the particular kind of land) and I would here repeat, that all land which is intended for improvement, should not be pastured, for by so doing, you exactly undo what you should do, that is, deprive the land of that shade, which is the great means of improving it. How often do we see the same piece of land receive repeated manurings, and see poor in the end as when you first undertook to improve; this is occasioned by taking off what you should leave on. Land, then, under a course of improvement, should not be pastured.—Never manure land but once, is my maxim; that is, while you own any that is too poor for cultivation without it. If you have brought in all your poor land so produce clover, then you can begin a second manuring, and so on ad infinitum. To recapitulate then, my practice is to take a poor piece of land, plough it up in the fall, plant it in corn as directed by my former communication, (which if attended to, will pay well for the trouble,) then in the following spring, spread a thin coat of manure on it, sow about a bushel and a peck of oats to the acre, and plough all in together, about 2 1/2 or 3 inches deep, and after brushing the ground level, sow about a gallon of clover seed to the acre. If the method was adhered to, we should soon have very little poor land in Maryland. In my next I shall say a word or two on planting potatoes, &c.

she ought to make her influence felt in all the departments of her proper sphere. Instead therefore of paying another woman to carry her keys, to lock and unlock the meat house, to visit the kitchen or dairy, or to superintend the poultry establishment, she ought to do these things herself. Nor let any active healthy woman (and these are the very women for farm wives) feel that in undertaking these things she will encumber herself with over much serving. It is true that these duties, if faithfully performed, will make it necessary for her to stay pretty much at home; but then industry, connected with early rising, and especially a tact for business, will make the whole comparatively easy.

Once knew a woman who had a remarkably kind and affectionate husband, but he was an easy "good for nothing" sort of a creature—would sit in the house all day, kiss his wife and caress his children, but would do almost nothing in the way of business. This good man's affairs, as may be supposed, regularly became more and more disordered. His estate, which was at first an ample one, got into ruin, and a heavy debt added greatly to their difficulties. In this state of things, this good man, but bad manager, died. The affectionate widow, was almost overwhelmed with sorrow. Here she was family dependent upon her for a support, and with a large debt for which she had to provide, and all this in the very midst of affliction and bad health. At length, when her grief had exhausted itself, she rallied her energies, and showed what she really was. A combination of circumstances now called her true character into action. She mounted her horse, and rode over her farm; the broken down fences were repaired, order was called out of confusion and with the aid of a head man alone, the estate was in a few years, completely relieved from its oppressive debt. This good lady, though now far advanced in life, enjoys better health and spirits than she did in her more youthful days, and all is to be ascribed to her enterprise, and industry. Should these remarks meet the eye of this good old lady, I hope she will excuse them. I submit that, not to render her conspicuous, but simply to show what industry and good management, even in a delicate female, can effect.

As another matter of economy, I will mention, that in the various appendages and fixtures of my farm I made it a point, that whatever I got should be of the very best order, and that without regard to the original cost. As an instance of this, I will state, that the cheapest cow I ever owned, cost me when delivered \$95. And in purchasing my fine hogs some time ago, I got some as low as \$30, but among them, there was one for which I paid at least \$120, and this is decidedly my cheapest hog.

And here I will take the liberty to remark, that farmers very often commit a capital blunder in this important thing. They often suppose that the cheapest things are those which cost the least money; whereas the cheapest are those which yield the greatest profit on the amount expended, and at the same time contribute most to our convenience and gratification. Perhaps there is no instance in which this mistake is more frequently and strikingly displayed than in the purchase of land. In this important matter, farmers seem often to lose the faculty of looking ahead, and fix their eye only on the present expenditure. The essential points, fertility, facilities for improvement, and convenience to a good and steady market, together with other things which make land really valuable, are all lost sight of, or are all merged in the sole consideration of a cheap purchase. A little good land in the neighborhood of a good market is worth more, in my opinion, than all the lands of the moon and of the seven stars put together.

#### THE FARM AND FARMING OF THE REV. J. H. TURNER—NO II.

From the Farmers' Register.

In a former communication, when treating of a sound economy, that most indispensable appendage to good management, in the hurry of writing, I omitted an illustration which I will now supply. I intended to state, that I keep no overseer. I once had one, but he, though a very honest and respectable man, gave me more trouble than all the negroes put together. I constantly had to do the very things which I paid him to do. It is a very rare thing that the hired men has any eyes except for his own interest. Accordingly, I had to see every thing, and tell the overseer about it, and direct him to do it; and this gave me more trouble than to do it myself.

These overseers, besides, are generally very expensive things. In addition to their wages, their families, if they have any, must be supported. An extra horse must be furnished for the man to ride, and an extra cook for the lady, and an extra cow for the family; and when these, together with the multitude of other nameless extras, are taken into the account, the aggregate becomes very formidable in the catalogue of expenses. Accordingly, it is no uncommon thing for the overseer to become rich much faster than the employer. Instead I have several times known him to acquire a handsome fortune, when the employer lost one. Some large estates, it may be necessary in some instances to have an overseer, but in ordinary cases, I do think it would be better to repose the necessary confidence in a faithful servant, and thus invest him with the authority and responsibility of a head man. On small farms there is no doubt on this subject.

Connected with this, I will, with the risk of "bringing an old house over my head," say, that the farmers' wife ought in ordinary cases to dispense with her housekeeper. Whilst her husband is his own manager in his proper department,

that the straggling cattle, in their wanderings, merely passed over it, without stopping to take more than a bite or two. In the mean time, I was busily looking out in the neighborhood of Richmond for a small farm, with the view of making it my own. I saw many, but for reasons which it is not necessary to detail, I could not or did not obtain them. At length my eye rested on this forlorn spot. It was in market, and notwithstanding the almost hopelessness of its aspect, I resolved on a purchase. In the midst of the many discouragements with which it was surrounded, there were however some redeeming circumstances which went a great way towards reconciling me to it. Its position, for instance, was in that direction from the city in which improvement was making the most rapid progress. It was situated on a good and level road, so that access to it would at all times be easy. Its surface was neither so hilly as to subject it to washing, nor so level as to retain large quantities of stagnant waters. Besides, when I came to examine the land itself, it was not so desperate as its first appearance indicated. It is true that a considerable portion was low, lying long both sides of three branches which passed through it, nearly the whole of which was a cold, tenacious pipe clay. But the remainder, which was far the greater proportion, was a light silicious soil, firmly imbedded on a strong red clay foundation.

These then are the materials on which I commenced my operations. In the details, I have perhaps been too particular, but I thought it necessary to be thus minute, that the reader might have a distinct view of the whole subject. And now the absorbing question with me was, how I could most speedily, and at the same time economically, bring these desolate lands into a state of profitable cultivation. To plant or sow them in their present state was a folly of which even one a tyro would not be guilty. In this emergency, I had almost no assistance except my own reflections, aided by the little experience I had acquired in my very early youth. At that time (15 years ago) Liebig had not written his "Organic Chemistry," in which he sets forth the great value of ammonia. I had never even heard or thought of humus, nor guano, nor poudrette, nor urate, nor bone dust, nor any other of the "multum in parvo" manures of which the locks tit at the present day. If the editor's invaluable "Essay on Calcareous Manures" was then in existence, I had not seen it. But in the midst of my want of information as to other and better means of improving lands, I was satisfied of the great and certain efficacy of rich putrescent manures. This was then my resource, and I availed myself of it with all the means in my power. In the beginning, as might naturally be supposed, I made many mistakes in the use of this article. For instance, I used it in the drill, when I ought to have applied it broadcast, and I immediately covered it with the plough, whereas I am now convinced that I ought to have left it on the surface. But amidst my blunders, I conceived the idea of making all the manure I could at home, and then of adding to it all in my power from town; and this I am sure was no mistake.

The reader is now in possession of the chief material by which I have brought my farm to its present fertility. The quantity used at first was about 50 cart loads of 25 bushels each to the acre. This materially improved the land, as the crops clearly indicated. But I could plainly perceive that there was an evident falling off in the second, and especially in the third, and fourth crops. This made a second manuring necessary; and I am now convinced, that excessively poor lands, such as mine were, cannot be made permanently rich under three distinct manurings. These several applications ought to follow one another at intervals of about three years. I find that land managed in this way will regularly furnish a crop every year, and at the end of nine years, have so much fertility as greatly to aid itself, by the rich luxuriant vegetation with which it is clothed. Subsequent cropping will make additional manuring necessary, but then half the original quantity will be sufficient. Our small farms, brought to this fertility, and regularly treated in this manner, will furnish a crop, according to the season, every year, and so far from deteriorating, will constantly improve; and this I call the "ne plus ultra" of good farming.

But there is another article, which I have used to a considerable extent, and with most decided advantage in enriching my farm; and that is the coal ashes. It was observation, and observation alone, which induced me at first to resort to this substance for the above purpose. I had never seen nor heard of its being used for any other object than that of stopping a ravine or of making a foot path to cross the muddy streets of a city. But I had remarked the Jamestown weed and other rich vegetation growing in the most luxuriant manner, around the edges of heaps of this article deposited in gullies and other very poor places. Doctor Fawcett, also from whom I made my first purchase, in sending for wood from his lot, had been in the habit of carrying out coal ashes and depositing them on the poor places. There also I had the most strik-

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