

Communications.

For the Carolina Farmer. Large Yields of Grapes. WITHEWILLE, N. C. Dec. 27, 1869. Messrs. Editors:—A few years ago Mr. Carver Maltby sold to Mr. T. M. Smith, over eighty (80) bushels of Seppernong grapes the production of one old vine. By some oversight this is said to have occurred in Louisiana. You are probably acquainted with both of the gentlemen as citizens of this (Columbus) County, and can locate the fact more correctly than the Louisiana paper. Mr. Maltby, having a large family and numerous visitors (all of whom had free access to his arbor) thinks the field that year over one hundred bushels.

Patent Air Treatment of Wines, Syrups and other Fluids Discovered by R. D'Heureuse in California.

Messrs. Editors:—A monarch of ancient times uttered this saying "There is nothing new under the sun." Had he lived in the 19th Century he would probably have changed his opinion. "Something new" stares at us in almost every journal of Art, Science or Mechanism. One of the latest and most valuable of these discoveries is that mentioned at the head of this article. It is applicable to wine, cider, malt liquors, distilling, preserving, tanning and the manufacture of sugar and syrups from sorghum, imphee and other canes. It may also be used advantageously in purifying cotton seed and other oils and fats, and for many other purposes. The advantages of air treatment for fermentation, germination and curing are manifold, extending over numerous branches of manufactures, and need only be pointed out to become obvious to every expert in those pursuits. This process accelerates and improves all fermentation and greatly improves the product. It ripens wine, cider, ale, porter and lager beer in as many months as it formerly took years. Applied to the fermentation and germination of malt grain, it insures to distillers and brewers a much superior product, with a saving of from 10 to 15 per cent of grain, and also a saving in time, room and apparatus. The use of this process in baking saves labor, yeast and time, whilst a better and sweeter bread is obtained. It removes fusil oil and all impurities from spirituous liquors and improves their value in a few hours 50 per cent, communicating the characteristics of age and mildness. The air method is now finding general adoption in this country and in Europe, and is revolutionizing those industrial pursuits to which it is applicable. We cannot afford to trust to chance in pursuits where a degree of certainty is attainable. We want to know how to obviate spoiling, souring, &c., and to accomplish what we intend in a safe, speedy and economical manner. Air treatment accomplishes this. The object and effect of air treatment in its application to fluids is a direct oxydizing action on the nitrogenous albumenous parts, by rendering them insoluble, and to eliminate them in an oxydized state, while an innocuous condition of the nitrogenous parts in solids is the desired and accomplished object of our treatment. These desirable results are obtained by no other chemicals than Air the mother of all organisms. The patented process is for the mode of passing air, or other gasses through the substances to be fermented, germinated or cured from below, and is accomplished by means of an air force pump connected by a rubber hook coupled by a screw to a perforated metal pipe laid on the bottom of cask or tank. The process is not expensive.

I propose Mr. Editor, in future, numbers to take up some of the most important industrial pursuits, and elucidate the practical applications of air treatment to them. Any information on the subject may be obtained by addressing the undersigned. A. C. Cook. Covington, Ga.

Pulpit eloquence in the Quaker district in Philadelphia, is considered to be "dead silence aggravated by an occasional groan."

The publisher of an Idaho newspaper, gives notice that all libel suits should be against him personally, "or they won't amount to a hill of beans."

Agricultural.

Alsike Clover. This new clover is attracting much attention at the North and deserves a more general test of its value in the Middle States. We suspect, however, that it is chiefly adapted to mountain regions and sections not subject to long summers. We find the following intelligent article on the subject in the Country Gentleman: Editors Country Gentleman:

I notice that you are receiving numerous inquiries concerning the Alsike clover, and will give my experience on raising this most valuable plant. It is but a few years since the weed was imported from Sweden, but it has been cultivated therein in the native pastures for many years. The root is fibrous, and the heads globular, with flesh-colored flowers. The plant bears a greater resemblance to the common white clover than to the red. It yields two mowings annually, if cut expressly for hay when in full bloom, which in this latitude is generally the last of June or the first of July. But if cut for seed it should stand about two weeks later, then affording abundance of superior pasturage for all kinds of stock. The seed is cut from the first crop. The Alsike when left to seed has its stalks and leaves yet green when the seeds are ripe, and produces much better hay than the red clover when cut for that purpose.

The weight of seed required to be sown is, according to circumstances, from three to four pounds per acre; the seed being much smaller, and branches more, a less quantity is required than of the red clover. Three pounds of Alsike seed will seed as much land as ten pounds of red clover. I sowed last spring three and a half pounds per acre, and it is thicker than necessary. The seed is sown at the usual time of sowing common or red clover on wheat, oats or barley. It generally yields from three to eight bushels of seed per acre. The heads are formed with pods like the common white clover, with several seeds in each pod. I have tried the Alsike by the side of red clover, the seed sown at the same time and in the same field, and find that horses, cattle and sheep, will not graze on the red clover so long as they can get a good bite on the Alsike. My opinion is no other clover is equal to it for the purpose of feeding cattle, sheep, and horses, and even as a fertilizer. The red clover will only last from two to three years in perfection, and often, if the soil be cold and moist, nearly half of the plants will rot, and the first or second year bald places will be found in many parts of the field; besides, in September or October, many crops left for seed are lost in consequence of heavy rains during that period, while the Alsike clover ripens its seed much sooner and continues in vigor much. Therefore much risk and expense are avoided and large profits accordingly accrue.

Farther, when this plant is once established, it will remain for many years in full vigor, and produce annually a greater quantity of herbage of excellent quality. It does not suffer from the severest frosts or drought, as the red clover does. It will flourish on low, cold, clay land, and on marshes that are drained sufficiently for growing timothy or redtop. It is as free from fuzz or dust as timothy, and it will not produce cough or heaves. It will grow from one and a half to three tons of superior hay per acre, according to season. I think I never saw a greater growth of red clover than I raised this season of the Alsike. Growing from three to five feet in length, it has many more branches, leaves, and blossoms, growing from the main stalk than red clover. Therefore the hay is much finer, and far superior in quality. In fact it is of the same nature as the common white clover, which all farmers understand, except growing to much larger size. All farmers know, who have had experience, that common white clover pasture is far superior to any red clover. Therefore, if it grew large enough to mow, it would make much better hay than red clover. The Alsike clover blossoms furnish an abundance of honey for bees. They can work on them as well as on the common white clover, and gather honey much faster. E. T. B. Marengo, Calhoun County, Mich.

Keep Sheep. The great majority of farms in this country are suitable for breeding, and feeding sheep. There is no other variety of stock on which so large a profit can be made in so short a time, with so small a capital.

Now, that reads well—don't it? Small capital, large profits and quick return.—What better business does any farmer want? One hundred dollars will buy twenty-four ewes and one ram at four dollars each. With due care the twenty-four ewes will produce thirty lambs, which if properly cared for, will sell to the butcher for four dollars each, and the fleeces of the old ones will be worth three and a half dollars each. Now let us sum up.

Table with 2 columns: Item and Price. 30 Lambs at \$4, each. \$120. 25 Fleeces at \$3.50 " 87.50. Total \$207.50

Allowing the old stock to be worth at the end of the year, first cost, will leave an advance of two hundred and seven dollars and fifty cents on a capital of one hundred dollars. These figures may not

suit every locality. They are too low for some and may be too high for others; but on an average very near the truth.

But the cry is against dogs. We admit that this is a serious evil; but it is one that may be overcome at little expense.—The remedy is this, buy a bell and strap for every sheep. These bells will last many years and still be worth half cost.—There is no dog that would chase a flock of twenty-five sheep if each one had a bell on; the noise would be too alarming—he could not stand it. A sheep dog is a great coward when at that business, he wants to do it slyly and quietly, and could not bear an alarm of twenty-five bells.

We see but one way of lessening the number of dogs; and that is taxing their owners so high that only valuable dogs would be kept, and they should be restricted to the owner's premises, unless accompanied by some member of the family.—Any family who has use for a dog, and owns a good one, would pay five dollars a year tax for him. A law to this effect would thin out the worthless curs very fast.

If the people in any considerable number would petition their Legislature for such a law, it would be granted. Let us see which will be the premium State by procuring the passage of such a law. It ought indeed, to be awarded a gold medal. Such a law would be a great blessing to many a poor family who now keep one, two or three worthless dogs eating the food from the children, and a nuisance to their neighbors.

There is something very interesting and pleasant in attending to a flock of sheep when it is well attended to and kept in good condition. To see a flock of sheep grazing on the hill side, or on the meadow bank with the lambs skipping, playing and chasing each other like school children, is not only a beautiful but a humanizing sight.—American Stock Journal.

How Three Bales of Cotton were made on one Acre of Land.

Colonel B. G. Lockett communicates to Colonel Styles of the Albany News the modus operandi employed by him in producing the enormous yield of 27,206 pounds of seed cotton from six acres of land.

Below we give Colonel Lockett's letter in full with the accompanying certificate: ALBANY, GA., Dec. 20, 1869.

COLONEL C. W. STYLES—Dear Sir:—I had prepared and planted six acres of land in cotton this year, the result of which (twenty-seven thousand two hundred and six pounds of seed cotton) was intended for the Georgia State Fair.

The premium having been awarded Jordan & Lockett for the greatest yield on two acres, I am receiving many letters asking information as to the mode of preparation and cultivation of land. I hope therefore, you will have the kindness to publish the following statement for the benefit of all wishing to know:

The land was first broken with the Watt & Knight A. B. plow, the large mould board attached, breaking the land about six inches deep—this was done the latter part of January. The land remained in this condition until ready to be planted, which was done on the 24th of April.—The rows were laid off five feet apart with an ordinary scooter plow, following in each furrow with a double wing shovel sixteen inches long and eleven inches wide, drawn by two mules. In this furrow was distributed about one hundred and fifty bushels of well rotted horse lot manure, and three hundred pounds of "John Merryman & Co.'s ammoniated dissolved bones," per acre. This was then covered with the Watt & Knight A. B. plow, small mould board attached, following in each furrow with a sub-soil plow breaking in all about fifteen inches deep. As soon as the preparation was completed the seed was planted, putting one bushel per acre, with the Dow Law planter.

As soon as the cotton was large enough, it was plowed with the sweep, cutting twenty-four inches wide, and one-half inch deep, and was at once chopped to a stand using No. 2, shovel hoe, leaving one and two, and sometimes three stalks—the width of the hoe—and as near as we could, ten thousand stalks per acre. The cotton was hoed twice and plowed seven times, using each time the twenty-four inch sweep and never cutting over one-half inch deep. It was cultivated with twenty-one furrows, but equally as good work could have been done with fifteen furrows by using a sweep a few inches wide.

I am also asked my opinion relative to the number of stalks that should be left on the acre to make the greatest yield.—There is great diversity of opinion upon this subject. My experience has been that much depends upon the variety of cotton seed planted. Those planting that variety of cotton which grows largely with long limbs, will never make a large yield by leaving eight or ten thousand stalks on an acre, while the prolific or short limb cotton will do better with this number than less.

I have endeavored to answer intelligently and concisely all the questions asked, and hope the statement may be of benefit to those asking the information.

Below I hand you the evidence of the yield, furnished the Committee at the State Fair.

Most respectfully yours, B. G. LOCKETT.

& Knight 'A B' plow, the large mould and board attached, breaking about six inches deep. A few days before planting, the rows were laid off with the ordinary scooter plow, five feet wide, followed by a double wing shovel plow sixteen inches long by eleven inches wide, drawn by two mules. In this furrow was put about one hundred and fifty bushels horse lot manure, and three hundred pounds John Merryman & Co's " ammoniated dissolved bones," per acre. We bedded upon this with the Watt & Knight "A. B" plow, small mould attached, following in each furrow with a subsoil plow, breaking in all about fifteen inches deep.

On the 24th day of April it was planted. The seed planted is known as the "Hunt Variety." This cotton was plowed seven times with the sweep, cutting twenty-four inches wide and one-half inch deep, and hoed twice after chipping. We left upon each acre as near as possible ten thousand stalks.

ALBANY, GA., Nov. 13, 1869.

We hereby certify that we weighed the cotton picked from the foregoing area of land (six and eighty-eight thousandths acres), and we found the total amount gathered to be twenty-seven thousand two hundred and six pounds seed cotton, one-third of which, say nine thousand and sixty-eight and two-thirds pounds, we weighed and had ginned and packed, showing a result of twenty-eight hundred and eighty-four pounds lint cotton, an average of fourteen hundred and twenty and two-thirds pounds per acre.

JOHN W. ALLEN, C. H. CAMFIELD, Y. G. RUST,

ALBANY, GA., Nov. 13, 1869.

I hereby certify that I have carefully surveyed a parcel of land pointed out to me by Capt. J. W. Allen, on that from which he has this year gathered 27,206 pounds seed cotton, and that I find the area of said parcel of land to be six and eighty-eight thousandths acres.

THOS. A. E. EVANS, Civil Engineer and Surveyor.

Farmer's Club of the American Institute.

EXTRACT FROM RECENT REPORT OF PROCEEDINGS.

CONVERTING DWARFS INTO STANDARDS.

—J. A. Newton, Brownville, Ind., asks if dwarf pear trees can be converted into standards by planting deep, and hilling about the stem. Mr. Fuller replied that any dwarf can be made a standard, after it gets into bearing, at will, by cutting notches in the pear wood above the quince. These notches should be cut at equal distances all about the tree in order that the pear stock may send out roots in all directions. After the notches are cut haul the earth about the tree, covering them. The junction of the quince and pear should always be below the surface of the ground; but it is desirable to make standards of them at once the junction should be five or six inches below the surface.

ADVANTAGES OF MAKING STANDARDS OF DWARFS.—Mr. Newton asks if by converting dwarfs into standards the early bearing and the long life and other advantages from standards can be secured.—Mr. Fuller replied yes, if the trees are allowed to bear before attempting to convert them into standards. Mr. Quinn said that the fruit of some varieties is of better size and quality where the tree is started as a dwarf, and afterwards converted into a standard. This is the case, he said, with the Duchesse d'Angouleme. In his orchards, this fruit grown on trees started as standards had never equaled those of the same variety on trees converted from dwarfs to standards.

REPORT ON POULTRY.—A committee appointed by the Club to visit and report upon poultry upon exhibition at the State Poultry Show reported that to obtain a condensed and satisfactory account of the best breeds they addressed questions to several well-known poultrymen, and received answers, of which the following are the gist, and which they regard as entitled to much consideration:—First—What breeds are at present most prized? A. Different breeders disagree, but it is at present thought that the majority prefer the Houdans, dark and light Brahmans, and Leghorns. Second—Are pure breeds preferable? A. The pure breeds are better than half breeds as layers, but not quite so hardy. Third—What fowls are best layers? A. White Leghorns and Aylesbury ducks. Fourth—Which grow fastest and make most dressed meat? A. Creve-Coeurs, light and dark Brahmans, or Aylesbury ducks. Fifth—For eggs and flesh both, which are best? A. Houdans. Sixth—For flavor and tenderness of flesh which breeds excel? A. Houdans, Dorking or Game and Rouen ducks. Seventh—For mothers which have you found best? A. Game and Dorking. Eighth—Is the Dorking hardy in this climate? A. No. Ninth—What feeding and range do you recommend? A. Ground feed in the morning mixed with warm water, whole grain at night, a little meat occasionally in Winter, with some broken oyster shell, all the range possible, and a good warm house are all that is necessary. Tenth—What is your opinion of poultry raising on a large scale? A. It can be done with great profit if the grounds and houses are large enough. Every hundred fowls should have at least an acre.

Agricultural. We had a very interesting conversation a few days ago, with one of the most successful cotton planters in this section of the State, and we proceed to lay before our readers a few of the grounds on which he bases his success.

He came to this country some twenty years ago, and commenced the production of cotton on a very small scale, because of the lack of means to go extensively into it. After the first year he never bought a peck of corn or pound of bacon until the war broke out, and to a considerable extent raised his working stock, thus making nearly the whole proceeds of his cotton crop clear profit. To this production of home supplies as far as practicable he ascribes his success.

He is well known in this community as a far-seeing, energetic man, economical with his resources, and prudent in their investment.

In reviewing his policy he perceives no error, except insufficient attention to the production of home supplies. From past experience he is convinced that horses and mules can be raised in the country at a much less cost than they can be obtained from the stock producing States. Thinks we need Winter grass, but in its absence, finds an excellent substitute in rye and wheat for Winter pasture. Says he, (and we fully concur) there is no better hay than can be made from our crown-foot grass. He intends this year to sow a few acres in oats, and after the oats are made prepare the ground for a crop of crown-foot hay. He intends also to plant the same quantity of ground in cotton, and compare the cost and products of the two plants of ground. He thinks that devoted to oats and hay, will prove the most profitable. We shall with interest await the result of this experiment.

If our planters would engage more extensively in such experiments, Northern hay would not, many years, find sale here at from \$2 to \$2.50 per hundred lbs., while large crops of oats would greatly diminish the demand for corn which is not a very profitable crop in this part of the country.—Albany, (Ga.) News.

Sugar from Sorghum.

The war gave the first impetus to the cultivation of the Chinese sugar cane or sorghum, but all the ingenuity of that period failed to solve the problem of transforming the syrup into sugar. It was known that the syrup was capable of granulation, but repeated experiments failed to produce this wished-for result, and it was only recently that the discovery was made. The new process subjects the cane to a treatment that removes everything except the saccharine matter. This is placed in large vats, where granulation soon sets in, and the syrup is in a proper condition for the mill. The latter is constructed on the simplest principles, and is capable of being worked with any power. The machine on exhibition in this city is worked by hand, the motive power being two Africans, who by turning a crank, revolve a cylinder in which the syrup being poured upon it while in rapid motion, the centrifugal force carries it to the sides of the cylinder, which are of fine gauze wire, and the atmospheric pressure forces the syrup through the tiny meshes and leaves the sugar coated against the sides. The cylinder makes sixty revolutions to one turn of the crank and on the small machine at Mr. Cart's office fifteen pounds of fine, clearly granulated sugar were made in two minutes.—The process was witnessed by a number of persons yesterday, and it is now a well established fact, that sugar can be made from sorghum, and the cultivation of this product is calculated to add largely to the agricultural wealth of our State.—Charleston News.

Poultry—Store Hogs—Manure.

Give to your hens access to gravel, to pure water, and as often as possible flesh of some kind. Lime or bones ground fine will also be found very useful in producing eggs, and should occasionally be placed within their reach. We will perhaps, in our next, give an idea of the best breeds of fowls.

Don't let your pigs intended for the next season be neglected. If once stunted in their early days, it is hard to bring them up to the right point to take on flesh when you may desire to hasten their growth.

Now is the season for looking to your manure heaps. Collect all the materials to be had on your farm to make compost heaps. Those who have much poultry can make manure from their dung equal in value and efficiency to any guano from the Chincha Islands, if properly managed.

Farmers should not rely upon a sense of smell in the purchase of Manures. Prof. Antisell, of Washington, the able and accomplished Chemist to the Department of Agriculture, says:

The sense of smell is a very unsafe test of the value of manure. Two or three dead cats will scent a ton of spurious superphosphate to an intolerable degree, while the pure article is nearly inodorous, of a sour taste. His statement also shows our liability to mistake bulk for value, and confirms opinions of scientific men, so often given, that the sewerage of cities, in the common system of drainage, is practically worthless for agricultural purposes, because too bulky to pay freight.