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THE PROGRESSIVE FARMER.

Has the largest circulation of any family agricultural or political paper published between Richmond and Atlanta

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

Vol. 14. RALEIGH, N. C., MARCH 7, 1899. No. 4

"I am standing now just behind the curtain, and in full glow of the coming sunset. Behind me are the shadows on the track, before me lies the dark valley and the river. When I mingle with its dark waters I want to cast one lingering look upon a country whose government is of the people, for the people, and by the people."—L. L. Polk, July 4th, 1890.

PRACTICAL FARM NOTES.

Written for The Progressive Farmer by the Editors and Hon. Guy E. Mitchell.

The exports of farm products for the month of January, 1899, were as follows:

Breadstuffs	$25,620 440
Provisions	16 341 974
Cotton	28,844 608

The New York Financier tells us that the Secretary of State of Nebraska is compiling a list of the mortgages filed and released for the year 1898 The work indicates that the "satisfied" during the year exceeds those "filed" by more than $50,000 000. The bulk of these show cash considerations, while in but few instances was suit necessary to secure a release and a large majority of the mortgages were paid by the farmers and stock raisers.

The wave which struck Nebraska would about be equalled in this State if in 1899, in addition to raising all our supplies, we should produce a 25 per cent. larger cotton crop than we ever have produced and should sell it at 10 cents per pound. Let us all rejoice with our brethren of the West, that for once they have escaped the tornadoes, the cyclones and the blizzards, and especially the bear in the wheat pit.

The American Banker says: "The surplus of the Merchants and Farmers' National Bank, of Charlotte, N. C., has increased its surplus from $10,000 to $47,000 in the last three years, in which period it has paid dividends of $38,000.'" This shows a net profit after paying all expenses and taxes, of $68,000 in three years, which is 11½ per cent. per annum. Besides this, the bank reports $12,506 15 as undivided profits. We would be pleased now to hear from any farmer who can show a net profit over and above all expenses and taxes of just one half the above for the same period. It is not our purpose to abuse bankers for accumulating wealth, but to stimulate our farmers to more systematic work, and to learn, apply and profit by lessons of usefulness which they may gather from as close a study of their business, and application of principles involved as they will find observed universally by frugal bankers. The average bank doubtless could not make as good a showing as the above. Nor could the average farmer show a net profit equal to half that of the average bank. While the farmer is producing the wealth of the country, he is allowing others to accumulate it. Whose fault is it?

The value and possibilities of irrigation are not generally appreciated in the United States where land is farmed in large acreages and only moderate crops expected. The yields of forage on irrigated meadows near Edinburg, Scotland, accoring to Sterer are almost beyond belief. The Craigentiny meadows, 200 acres in extent, yield five cuts of grass, aggregating from 50 to 70 tons per acre, between the first of April and the end of October, which are sold to cow keepers for from $80 to $150 per ocre, the farm thus turning into its owner every year from $15 000 to $20,000 gross. The milkmen acknowledge that they cannot get any milk-producing food to compete with this grass, for the same amount of money.

On the Myremill farm, near Maybole, Scotland, 70 acres in Italian rye grass is said to have produced 70 tons of green weight per acre or 4,900 tons, the market value of one crop largely exceeding the cost of the irrigating plant.

These are astonishing figures, but when it is considered, however, for an instance of how plants consume water, that 452 pounds of water are necessary to the production of each pound of dry product in red clover, it can be seen to what good use plants can put an abundant supply of water if available or furnished to them during their entire growing season. And the reason that such crops never can be produced without artificial watering is that there never is a season when at some time plant growth is not checked for want of water. No matter how favorable the weather or how generally abundant the rains and how apparently continuous the growth, there are always in every season, some periods when the professional irrigator would supplement nature with artificial watering and further crowd plant growth.

We gave a few weeks ago a clipping from an exchange regarding the value of broom corn, which brought us many requests for further information regarding the crop. This information is given in another column. Prof. W. F. Massey, however, does not agree with some other agricultural writers as to the profits of broom corn growing.

Writing in an exchange, he says:

"The fact is that there is no crop raised in this country that is subject to such variation in price as the broom corn crop, and commonly the price is so low that 5 cent cotton is far ahead of it. Then, too, the crop is one that requires the richest of land, and the lands here that will make half a bale of cotton to the acre would not begin to make a profitable crop of broom corn. It is a very exacting crop in its requirements, and very exhaustive to the land. The culture is now almost entirely confined to the rich prairie lands of Illinois and there it is not esteemed a crop of uniform profit by any means. It requires special skill in the handling of the crop in the field, special machinery for preparing it and baling it for the market, and altogether is not a crop that much of our land is adapted to. It might be grown at a profit on some of the rich river bottom lands when the price rules high, but a very favorable season for the Western crop would send the price down so low that the men who grew it here would wish they had planted 5 cent cotton."

Having now given the different opinions as to the value of the crop, our readers may act as jury and take the case.

AGRICULTURE.

REGARDING BROOM CORN.

Correspondence of The Progressive Farmer.

In answer to the letters received from you a few days ago, I beg your permission to offer the following matter prepared by me when we were doing some sub station work in the Experiment Station.

BROOM CORN EXPERIMENT.

Object—To help extend the cultivation of this valuable crop among our farmers, and thus increase the number of crops which may be depended on for additions to the income from the farm.

Use of Broom Corn—First, the brush for making brooms and making the brooms in winter on the farm if desirable as where long carriage to factory or railroad station for sale would be too expensive. Second, for the seed to be used for food for farm stock. This is very valuable, ranking along with sorghum seed and about as rich as corn in nutritive compounds.

Details for Making the Experiment—The land must be as rich to grow this crop as for sorghum or corn. If not in good condition, as heavy dsessing as needed for a good crop of corn should be applied broadcast or in the drill or hill.

Plowing and Seed bed—Plow deeply and well and harrow to a fine seed bed. If stubborn, cut up with a disk or cutaway and roll with heavy roller to break the lumps. A fine deep seed bed must be made to insure a good early growth.

Plats—Lay off rows same as for corn and sorghum and make plats one of the following dimensions:

16½ ft. by 132 ft
12¾ ft by 176 ft. } This gives 1 20 of an acre.
8½ ft. by 264 ft.

Seeding—Furrow out if to be manured in the drill or hill and spread the stable manure evenly in the furrow, cover this with earth by turning furrow back, very light, and plant seed about one inch deep. A very little seed is sufficient, but to insure a good stand, it is usual to plant much more than is allowed to grow and thin to stand 6 to 10 stalks if in hill 3x4 feet apart or about 3 to 5 per yard where drilled. From 2 to 6 or 8 quarts of seed per acre may be sown, but with perfect seed one quart will give a good stand on rich land.

Cultivation—This must be promptly given as soon as the plants appear. This is like sorgbum in that careful work is needed until about one to two feet high, at which time it begins to grow rapidly and shade the ground it will take care of itself.

Harvesting—When the flowers are shedding their pollen, go through the plat and lap down the stalk at about one foot below the brush. This will cause the brush to ripen straight and cure better when the seed is ripe cut off about 8 inches of the stem with the brush, tie in convenient bundles and take to barn or shed. Spread out thin and straight or hang up under a good roof. Three or four weeks will cure the brush and the seed may be removed by a long toothed curry comb or by a wooden comb, the teeth of which are made by sawing teeth in a plank. The brush must not be broken if a good marketable brush is desired. The brush is assorted by keeping the straight and crooked or injured in separate lots. Market may be found for the brush at broom factories, which up to date have been established in (at the time this was written there was a factory at Morganton, possibly at one or two other points in this State). If no factory has been established near you, and you secure a good crop and others are interested in the culture of broom corn, it will be very easy to start a broom factory at or near your home. Very little machinery is required and that inexpensive to make good brooms.

Seed may be obtained from any reliable seedsman. Look in the advertising columns or The Progressive Farmer for names of reliable firms and write them for catalogues, etc.

Respectfully,

FRANK E. EMERY,
Agriculturist N. C. Exp't Station.

CORN AND IRISH POTATOES.

Correspondence of the Progressive Farmer.

GREENSBORO, N. C., Feb. 28, 99.

There are some things that it is well to repeat time and again. Because new farmers are beginning to read and gather information from all directions possible. Articles on corn growing may cause some to think of a cheaper and better way than that which the writer suggests. So it may do good for the young to try a good way of his own. This writer has tried many plans to make cheap corn and in a good supply. But one plan always gave him more satisfaction than any other. Turn the land fairly well and then with a colter or narrow bull tongue cross the first plowing just as deep as the stock can well carry the plow to get a deep bed below to retain the moisture. Be sure to put the furrows close together. This plowing may be done some time after the first plowing. Before you plant, give this same land another thorough plowing at a good depth and then as you run your rows for planting have your corn ready and plant in a fresh plowed bed. Rows should be run near six feet apart, one grain to the hill about eighteen inches apart, guano to start the growth. When corn is well up put in your long, bull tongue plow as deep as you well can and close to corn, plowing out the entire middle. When corn is two feet high take a good turn plow and lap up well, plowing out the entire row. This lays by with plow. Then with your Acme one horse harrow, one round to the middle, going twice with harrow, or more if you like. I should have said if you have rough manure, put it around the corn before plowing. In places you may need to go over with hoe to chop out such growth as the plow has failed to destroy.

So much for corn growing. Now something as to the Irish potato.

Of all the table supplies for family use in the way of food every month in the year, there is nothing that is more useful than the Irish potato. And to our shame, they are shipped to us from other States. We have the land and climate that will grow large potatoes and a fair yield to the acre. Let us learn how to grow them to as good profit as any people and keep in our own State the money North Carolina people spend for them. Plow the land deep and fine about three times before planting, and have a deep bed of well broken land below the potato when planted. Open furrow for planting—not too deep—put in guano in a quantity and such manure as you have, lightly running a narrow bull tongue plow through the guano and manure. Cutting large potatoes into about eight pieces, drop 14 inches apart. When well up thin them as you would corn. Work very shallow, and when they begin to set for bloom do not work them; let all grow together. Be sure not to put much earth up to the plants. For as fine potatoes as the writer ever grew he did all the work before planting. If you work them too much they will put on many small and no large potatoes.

R. R. MOORE.

THE GENERAL CHEMICAL COMPANY.

This company, like the jute bagging trust of a few years ago, will be apt to be heard from. This company was incorporated February 15th, in Albany, New York, with a capital stock of $25,000,000; its main office will be in Philipstown, N. Y.

A trade war has been going on for sometime between the companies, which have now combined into this gigantic trust, and now the chemicals which go into the fertilizers of the farmer will be made to realize dividends to the stockholders, ample to satisfy the greed and pay all the expenses of the war of the past. Some of the companies covered in this combination are: The Nichols Chemical Company, M. Kalofleich Chemical Company, Jas. L Morgan & Co., Dundee Chemical Company, Lodi Chemical Company, Passaic Chemical Company, Highlands Chemical Company, Fairfield Chemical Company, Moro Phillips Chemical Company, Philadelphia Chemical Company, and National Chemical Company. These fellows realize that "in union there is strength." Will the farmers ever realize this?

WHIP-POOR-WILL PEAS.

It is truly surprising that this splendid feed crop should have been so long neglected, and still more surprising when I tell you not one farmer in 100 knows how to cultivate and save this crop or at all appreciate its value. We hear a great deal of late years about rotation of crops, and in a few more years there will go up from all over this splendid land a howl that "the virgin fertility of our soil is exhausted; we don't raise the crops now we once did." This may now be said of thousands of acres of our lands. Commercial fertilizers are simply plant stimulants and in the end exhausts the soil. To haul out manure is impossible to any great extent, and if our impoverished lands are to be restored, it must be done by a system of green soiling, something grown on the land and plowed in to fill the soil with humus and other forms of plant food. The pea family has been proven to be the very best possible for this purpose. I shall plant one fifth of my farm every year in pease, gather what I want for food and seed, and plow under the balance. Thus will I rest my whole farm one year in five, but will also fertilize it, so I am sure the other four fifths will in the long run make me more stuff than the whole would have done, and thus I can keep up indefinitely the fertility of my soil.

Peas is the crop best suited for this and for many reasons. I prefer the whip poor will pea because it stands our hot, dry climates better than any I have ever tried. It is a bunch pea and easy to cultivate and harvest. It is a quick maturing pea and will make good crops even if planted in June, and is the best pea to follow oats. It is a good table pea and is splendid for any and all kinds of stock; will produce 40 or 50 bushels per acre, and the vines cut and cured as hay will make two or three tons per acre of splendid hay, equal to the best raised anywhere.

To plant and cultivate them, don't sow them on stubble land (why grow oats at all?), nor yet in corn rows. Give them full possession of your ground. They are worthy of your best land and best care. Break up the ground early in the spring and harrow it off nicely; harrow after every rain. This will keep down weeds and grass, put the soil in fine tilth and conserve the moisture in the soil. About the first of May drill them with a planter, or by hand, fifteen or eighteen inches in the row, and rows three and a half feet apart. Hoe and plow as you would corn. I use a 16 inch bull sweep, two or three furrows to the row; simply keep the ground loose and mellow and the surface stirred often, very shallow. They come up quickly, grow very rapidly and will soon cover the entire ground. A crop of whip poor will peas is the best possible to plant in your orchard. When the pods are ripe, gather the first crop in sacks as you do cotton. In a few weeks the second crop will come on and begin to ripen. When the top leaves begin to turn yellow, by which you will know they have done their year's work, cut them down. You can do this with a mowing machine, a grass blade or a sharp hoe. A hand can, with a sharp hoe, cut down as many acres as he can hoe cotton, and it it is no heavier work. Let them lay on the ground two days, then put them in small shocks, and in two more days they can be hauled in and housed, or can be stacked about a pole, being capped with hay or cane fodder. Peas thus managed will make you 30 or 40 bushels per acre, according to soil and seasons, and will give you two or three tons of hay, which is first-class. The peas are as easy to gather as cotton, and a hand can gather about as many pounds as he can of cotton. One hundred pounds of peas in the pods will yield about twenty five pounds of seed. The hay per ton can be gathered and cured as easy as any hay I have ever handled. It is as sure a crop as sorghum and incomparably better feed for any kind of stock. Land too poor for corn will yield a fair crop of peas and pea hay, and under its culture will annually improve its fertility. Raise a little corn and lots of Kaffir, whip poor will peas and Spanish peanuts.—H. B Hillyer, Bowie, Texas.

A CHEAP COMPOST HEAP.

The old-fashioned compost heap is by no means a thing of the past. Not infrequently conditions exist which render this time honored method of disposing of farm waste ill-advised, but it is equally certain that under some circumstances it is the best and most profitable plan that can be pursued.

Those who have idle teams, and who can command interrupted labor at low cost, and whose lands are so nearly level that there is little danger of loss from surface washing from winter rains or melting snows, will generally find it to their advantage to haul out and distribute their stable manure as fast as it is produced Its actual value is always at its maximum at this time, and very little loss is likely to result from this treatment even when the ground is covered with snow.

In many cases, however, this plan is difficult of execution or for some other reason impracticable. In this case, two courses are open to the intelligent farmer. The first is to make an old fashioned compost heap. When well done this gives admirable results, and for spring crops, garden vegetables, small fruits, etc., nothing can be better than the thoroughly rotted mass of material which results. The trouble with this plan is that it is expensive, that it involves a considerable amount of handling and rehandling, and unless carefully and judiciously done, the results are likely to prove disappointing. Those who would make this plan a success must observe several cardinal rules.

First, a compost heap should always be made under shelter. Sometimes a layer of earth is used as a substitute; this, of course, is much better than nothing, but is only to be recommended where no roofted shed is available. Second, with each ton of fresh stable manure added to the pile, there should be sprinkled over it from seventy five to one hundred pounds of kainit, or one quarter of this amount of muriate or high grade sulphate of potash, and forty or fifty pounds of superphosphate. Where kainit can be had cheaply, this is probably the best form of potash for the compost heap, as the salt it contains aids greatly in keeping the pile moist and so prevents fire fanging. At the same time the sodium chloride exerts a specific influence in preventing the loss of ammonia salts, and in other ways beneficially influences the result. Third, the temperature of the compost heap must be carefully watched. By occasionally inserting the hands a fair estimate may be made. It should go pretty well into the mass, however, as this is usually the danger point. A stick driven down deeply and allowed to remain for a few moments, will give a rough test. If it comes up warm or warmer than the hand no time should be lost in opening up the pile, wetting the heated portion, and, if possible, thoroughly forking over and mixing the whole mass. Fourth, everything in the way of farm waste should be added to enlarge the bulk and the value of this home made product. This should include all house slops, kitchen refuse, manure from hen roosts, pig pens, excrementation materials from any source, leaves, spoiled hay, old bones, discarded woolen garments, anything indeed of animal or vegetable origin that will make humus or increase the general store of plant food.

Now, all this involves work, care and consequent expense, and it is often questionable whether on the whole, save, perhaps, in the case of market gardeners near large cities, the results will repay the cost.

In such a case a kind of "compromise" may wisely be adopted, a plan which in practice involves little additional cost beyond that involved in the daily cleaning of the stables and one that on the whole gives almost as good results as the old fashioned method of composting. For this, all that is needed is a convenient shelter closely adjacent to the stables or other sources of manure. The daily output from the stalls is simply spread over the accumulating heap. The kainit and superphosphate are then distributed over it in the same proportions as suggested above, care being taken that enough water is added to keep the mass as wet as it can be without any drainage. Of course the materials that can be profitably added to such an accumulating mass include everything that can be included in a compost heap. By this plan all extra handling is avoided, and while the resulting product is not as well decomposed or so uniform in character as that from a well cared for compost heap, yet the saving of labor will usually more than make up the difference.

This plan gives for spring crops, or a surface dressing for winter crops, a complete fertilizer at small cost. The amount required per acre will, of course, vary with soil conditions as well as well as the product grown. Ten tons, or ten full two horse loads, will be equal and in many cases much superior in value to a ton of ordinary high-grade commercial fertilizer, costing $30 or so. The application can safely be made on this basis. The fact that the potash and phosphoric acid are already intimately mixed with the stable manures given them added value and saves the additional labor of their distribution. Those who adopt this labor-saving and economical plan of semi-composting and at the same time fortifying and strengthening the home product are not likely to soon abandon it.—Southern Cultivator.

HORTICULTURE

THE APPLE.

Correspondence of the Progressive Farmer.

God first created the earth; He then set out a good apple orchard of various kinds, then He made Adam and placed him in the orchard, to keep it. A good example for man to go by in all coming time.

The first thing every man should do is to buy from one to ten acres of land and immediately proceed to set half of it in good apple scions. And the best way on earth to get those scions is to write to T. B. Parker, S. B. A., Hillsboro, N. C.

I am telling others what I know by experience. I sent to Bro. Parker sometime ago for a lot of trees, and when they came, they were so nice, and the bill showed them to be so cheap, that it made me almost feel that I had gotten something for nothing. Up to the first of April is a good time to set out trees. Let five hundred men try Bro. Parker, at once, with an order for at least one dollar's worth, and my word for it, he will agreeably surprise you. When you set out these trees, you must cultivate them well, "dig about and dung" them well, and watch over them carefully, and they will prove a wise investment with a quick return. Adam became a little careless, and the devil got in his orchard one night and played the mischief. Look

[CONTINUED ON PAGE 8.]