THE PROGRESSIVE FARMER.

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

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EDITORIAL SUGGESTIONS.

Get ready to plant your upland corn early. To make good heavy corn, the land should be well prepared and planted early.

Fast milking is desirable. Slow milking may not affect the yield, but it has been shown that it is detrimental to the richness of the milk.

It is said that the people in the Red River valley are thinking of starting co operative creameries. Such creameries might be started in many sections with profit.

When the cows begin to scatter as soon as a man appears, it may be concluded that he is a rough man and is stroying the profits of his dairy in a very foolish way.

The tobacco industry in the vicinity of Cincinnati, O., is no small one. One warehouse alone sold leaf tobacco in 1894 to the value of $2,420,000, while six warehouses sold 75,300 hogsheads, valued at $9,660,000.

Don't plant much of any one crop. Diversify. Grow things that will sustain life. You cannot afford to buy supplies outside of your own neighborhood. But if that should be necessary it would not be like sending the money to other sections of the country.

We don't count any chickens before they are hatched, but if crimson clover goes through this hard winter in fair condition, we are going to be modest enough to claim our share for the spread of information that led to the spread of the clover. If it does winter-kill, we purpose to say, "*Try it again!*" That's the way we stand by our friends, says the *Rural New Yorker*.

The pear tree grows best and yields the most fruit when planted upon land moderately moist, and yet not cold To insure this condition there is nothing better than a side hill location, though one more level may do well if underdrained, and then it is better for receiving a wash of sand from the uplands above it, which helps to warm it up. Two conditions are fatal to this fruit, and they are a lack of moisture in the soil and a lack of dryness in the soil.

DISPOSAL OF COTTON SEED.

Paper Read Before the L. L. Polk Alliance Recently by Bro. F. E. Emery, of the N. C. Experiment Station.

This is a question of vital importance to this whole country. What shall be done, and what shall be the consideration if sold or exchanged? Or, to what shall the seed be fed and for what purpose?

Since the days when cotton seed was dumped into the bayous of Mississippi and Alabama, or accumulating in great quantities, gins were moved to get away from the mass of waste, a change has been wrought out. This seed has been the subject of study and a source of wealth because of its content of certain articles of value to man when properly extracted and prepared. The preparation of these articles has come to be a great industry worthy of our respect. It has through seeking profitable employment turned back to the seed growers considerable value where before little if anything was received. This has been in brief, the history of other industries.

As new uses have been found for what had previously been waste products, capital has interested itself and found remunerative employment in lines but recently thought of and explored. Only a few years ago the sawdust from our numerous lumber mills was wholly waste. It was run into the rivers and has done great damage in various ways, obstructing channels, causing overflows on valuable lands, destroying the finny tribes which formerly served as food of importance to many people. With the advent of steam this sawdust was partly used for fuel, then turned into paper, and now we hear that it is becoming the bulk of a new kind of bread which can be made in Europe, cheaper than wheat flour bread, and thus a once nuisance becomes food for the people. A cheaper food product may or may not reduce the values of our food crops, but other agencies are at work which do not reduce our values, and at the same time by a subtle but inevitable logic increases the cost of production.

This is true of more of the staple products of your farms than you can believe at first thought, but dwell on the subject; study it with the best information you can command, and you will find yourself drifting into a rapidly narrowing vortex. Formerly there was margin enough between cost of a crop and the price it would bring to assure a comfortable living to the cultivator of the soil. The yield decreases as a natural consequence of robbing the soil of too much of its fertility and exchanging the resulting product for too little of some other article of material wealth to support the cultivator and restore to that soil the excess withdrawn. Competition is said to be the life of trade, but woe it is to that individual or community, who has to stand behind a lively competition and furnish material products at lower, and continually lower prices. Do you not feel this in the price of cotton? This is only one article of commerce, but it happens to be the one we are interested to discuss in the interest of the people who make it possible for others to amass wealth by dealing in it, manufacturing it, and handling its seed products; also for people to enjoy the comforts and pleasures derived from so many of the necessary and luxurious uses to which the cotton lint contributes in the world.

It is not proposed to lay down a fiat here by which this staple may be enhanced in price. That is an improbable thing to do in this age, and with the conditions which confront the American people. It is, however, proposed to give this audience some food for thought as to whether we shall, as individuals or collectively as a community, gather and use our own twigs for our own purposes, or turn them over to some commercial fellow to sell where they will become clubs to drive us out of the market places, general or local. More thoughts on this line crowd for place than I have time to give, and in the hasty preparation perhaps the best may not be chosen. If those selected serve to awaken thoughts enough to stimulate a few to action, my object is accomplished. Example, which is better than precept, will then step in, you will lead each other far ahead of my sight in the line undertaken.

Within the past four years cotton seed has sold in this State, and I believe in this market, for a price ranging between 1 1-5 and 2 5 of one cent per pound or between $21½ and $8 per ton.

The only reason in the world I can see for the decision of the question under discussion by any farmer is whether he can get for his seed an equivalent value from one or the other ways of disposing of it; and, in the end, the effect which will be exerted; first, on his farm; second, in the net value received in other articles including a return of the draft made on the soil, and third, its effect on the competition which the sale of this seed brings back to him in the production of other articles of importance.

OF THE EFFECT ON THE FARM

Cotton growing is a neat and easy branch of husbandry. You plow, plant, cultivate, hoe and pick out the seed cotton and move it to the gin all in the regular business hours of the mechanic. Nature does all the rest, except that the speculator sets the price and you wonder, when the cash or bill of credit is in your hand, whether it is worth the candle or not. If you have had an exceptionally favorable season, your soil was bountiful and the yield large, you will put your head up against some other fellow and figure down the cost to the minimum, aye, below what it actually did cost, and drawing a comparison with exceptional yield, publish a statement to the world that cotton can be successfully grown so long as the price remains above your low figure, and the world goes to bed with the conviction that cotton farmers are getting rich. This is a sample of the farmers' plans of keeping trade secrets. It is as broad as is this country and confined to no branch of agriculture. What merchant does not guard with care the amount of margin he can secure on each article he offers for sale?

What lawyer, doctor, or other professional man does not think of the years of study, nights of toil and days on which no fees come to him, and charge you enough over the day's expenses to cover a proportional part of all. What manufacturer does not count interest on plant, breakages, wear and tear and other expenses, and keep all these in mind in affixing prices on his wares? Why should not every farmer pay some regard to these and keep his balances on crops as close as others do their similar interests. But with your favorable year and large yield an exceedingly large part of the capital invested in soil has been removed and stored as crop. How much ought to laid aside to be returned, or how much should be immediately put back on that field with the fall sowing of clover or wheat or grass seed? Of the seed cotton approximately one-third is lint which comes mostly from the free elements in air and water. Two-thirds is seed, and in this we shall find the principal draft on the soil. The stalks are broken down and plowed in so their elements return eventually to the soil. If the product of each acre were 1,000 pounds of seed, it is easy to find out what has been removed. From the annual report of the N. C. Experiment Station for 1892 we find an excellent article showing what the seed, their hulls, the kernels and the resulting meal contains, and which has been taken up from the soil. The most important of these in 1,000 pounds of seed are as follows: Seed divided into hulls 500 pounds, kernels 500 pounds.

				Total in 1,000 lbs seed
Nitrogen	in hulls	3 32,	in kern'ls 23 40,	26.720
Potash	" "	6 896,	" " 5 725,	12.621
Phos'ic Acid	" "	0 484,	" " 8 65,	9 134
Lime	" "	0.81	" " 0 82,	1 16

The value of these, to put back on the land (Fertilizer Control Bulletin) potash 5c., phosporic acid 4½c., ammonia 14c. (equivalent to nitrogen 17c.) per pound amounts to $5 58 per 1,000 pounds or per acre, of which 93c. belong to the hulls and $4.65 to the kernels. This amount should be spent in commercial manures to put back in place of what is lost in the 1 000 pounds of seed if sold.

If this seed is returned to the soil there should be no depreciation from raising cotton lint, provided it is not lost in some other way, as of potash by leaching and nitrogen by decay of vegetable matter and a return to the air in a gaseous state.

If exchanged, the oil mills will give one ton of meal for two tons of seed or 500 pounds of meal for this 1,000 pounds of seed grown on one acre. An average of four analyses of meal (Bulletin 106 N. C Experiment Station, p. —,) in our digestion experiments yielded 6 205 pounds of nitrogen per 100 pounds of meal. The potash 1 75 pounds and phosphoric acid 2.42 pounds available are taken from an analysis for plat work (Bulletin 89, p. 4,). At the prices given above 500 pounds of this meal contains $6 32 worth of the fertilizing elements, Therefore to make the exchange we get $0 74 for hauling 1,000 pounds to the mill and 500 pounds back home. This rate will pay for a short haul where at least two tons of seed can be exchanged in one day by one team for one ton of meal. Calculated in this way the seed is sold at 16⅔ cents per bushel and the team has a value of nearly $3 00 ($2 96) for making the exchange.

Suppose this same value be allowed the team for moving the seed in case it is sold and the price be increased by so much per bushel, the price to correspond should be $11 16 plus $1 48 or $12 64 per ton, which for 66⅔ bushels is 18 96 cents per bushel. This is in consideration of no other factors than the fertilizing values of the seed and giving for transportation simply what the mill offers as an inducement to haul the seed in exchange. If the seed is sold, the price at present rates for the value given for potash, phosphoric acid and nitrogen should not be less than 19 cents per bushel. But there are other factors yet to be considered which will tend to advance that price. There is a feeding value not easy of definition which will considerably advance the price of seed wherever the cotton farmer is paying a proper attention to stock and where well-bred cattle and sheep are fed for the dairy, beef, mutton and wool. The feeding value may be approximated to a certain extent by a comparison of heat equivalents as found from the digestible portion of each. The large amount of oil in the whole seed unduly increasing this value of the seed while the large amount of protein in the meal specially fits it to become the most economical food to "balance" coarse carbonaceous foods that are plentiful on nearly every farm. The meal is worth more in comparison with seed than can be thus shown, but it is far from being worth two for one to feed stock. Third, the value of cotton seed meal just mentioned has come to be recognized far and wide. It is sought for because it is so rich in protein that a small amount goes a long way in producing a rational ration with the coarse foods common on farms in the first place, and in the second place because it has long been *the cheapest of foods* in the market in comparing the values received for the market prices asked. It is time that the serious attention of the farmers, merchants and oil mill men should be directed to this fact and immediate steps taken to push up the price to a reasonable point. This may decrease the demand for cotton seed meal, but if the difference is added to the price of seed it will go a step toward undoing the wrong done to the cotton growers by taking valuable article from him at half its worth and handing it over to some one else at three fourths its value. If it were the avowed purpose of the dealers in cotton seed and its products to break down the cotton growing sections financially, no surer way could be devised than the present system. It is in effect robbing the soil and impoverishing tillers, while at present nothing like an adequate value is being returned to those who sell their seed.

A ton of cotton seed meal, no better than some which has been found to contain protein 39.50 per cent. available phosphoric acid 2 42 per cent., and potash 1.75 per cent., carries in itself what according to present valuations is worth and will cost the farmer $25 40 in commercial fertilizers. At the same rates the seed is worth $11.16 per ton. If A. accepts less than that amount for his seed he yields up the difference from the soil, and gives his labor spent in making sale and delivery.

Third This article from your farms sold, as has long been done at less than its value and recently at very far less than its value, tends to return against dairymen at least, in crushing competition. As long as this continues to be sold so cheap every farmer should turn feeder of beef, mutton, and dairy stock and insist on buying at the same rates per car load that the meal brings f. o. b. when started North. This last is for non-cotton raising farmers. Those who raise cotton should feed their seed, and exchange it for meal at two for one of meal, feed all possible and use the balance for direct application to the soil at less than 18 or cents per bushel.

A large proportion of farmers have but a very inadequate idea of the value of a good home garden, and so it is persistently neglected. To very many farmers, the garden work seems small and petty—they are used to larger fields and more extensive crops. Yet it may be safely stated that a well-planned and well kept garden far outstrips in actual profit any other feature of the farm. We do not mean that it brings in large cash returns—its dividends are in the nature of improved health, of much relief from the burden of housewifely cares on the farm and in its tendency to make home pleasant to all concerned.

PRACTICE AND PRECEPT.

Agriculturist Emery, of North Carolina, Asks Some Questions.

MY DEAR MR. BENNINGER:—I am asked to recommend and induce some of our young men to go on to stock farms, to be presumably active working foremen. They will be expected to milk cows and make butter of the milk, then turn their hands to whatever there may be to do on the farm or in the stable.

This is rather a novelty in the South, and all our ideas do not harmonize. For instance, what pay would a foreman be able to command for such work in your vicinity?

If not expected to lead, but to milk and make prime butter and then fill in the time in testing milk with the Babcock test, or at any other work at hand, what pay would the man command in Pennsylvania? An early reply will be appreciated.

Our people complain some about competition at the prices which obtain for butter and feeds for cattle and horses. Much of the former have to be shipped from the North, while one or two articles are sent from here there. It must follow of course that on feeding the coarse, bulks foods which have had freight rates added to the price, the butter must cost much more when made than the first price with only freight charge on the butter itself.

Please give us something on prices and freight rates for comparision?—*Frank E. Emery, Agriculturist N. C. Experiment Station, Raleigh, N. C.*

REPLY BY MR. BENNINGER

The idea is a grand one and one that our Northern colleges should have adopted long ago.

I have had in my employ a graduate of Amherst Agricultural College, Mass., as herdsman. He was scientificaly a good man and understood the science of feeding all right but was too slow to do the work successfully and profitably and I was obliged to get a man from a stock farm, who had practical experience. Last spring I secured a graduate from the Cornell University to take charge of our French coach horse. This man was scientific and understood the science of feeding, but was not practical enough to make it a success.

There is at this time a great demand for educated and practical men as farm managers and herdsmen, but they must be able to take hold and show how to do things as well as to be able to tell how it is done.

The wages for such services varies from $30 to $100 a month. I am paying my herdsman $45 a month, and he is not a college graduate; if he was, his services would be worth at least $25 a month more. A stock breeder in New York pays his herdsman $60 a month, and his manager and salesman about $100 a month and board.

I know of several positions open now for first-class herdsmen at about $50 a month and board, but in these cases they must be able to make records and fit and show cattle at the fairs.

There are a number of rich men who run farms as a plaything, or side shows, and care not whether they make much money or not, but in all cases want it self-sustaining and want good practical farm managers.

The idea of sending students to good paying stock farms is a good one, but they must be willing to take off their coats and go to work and learn how to feed, milk, disinfect the bran, take care of the manure, and, above all, learn how to keep the cattle and everything clean, together with a hundred other things that are absolute necessities on a stock farm. This would give them a chance to learn how to sell stock.

In regard to the coarse feed in the dairy, I am convinced that the Southern people are in error, for I learned while in the South that they can grow the best dairy feed in the country. The best food that we have in all its stages is corn, which is their second staple crop. The next thing is cotton seed meal to make butter, and the cotton seed hulls are as good as the average hay made in the North. Besides I do not see why hay cannot be raised in the North. I would grow oats and corn and cut while young if I could not raise any other hay.

I am of the opinion that coarse dairy food could be raised for about what the freight rate would be on the same.

I think that Southern farmers do not fertilize and cultivate their land enough.

I find that a dairyman cannot be successful unless he properly feeds and takes care of his cattle, and good crops can also not be raised unless the land is properly cultivated and something put on to feed the plants.

I have long ago learned that the rail road companies charge all the freight that traffic can bear, and that is one reason why Southern dairy farmers should raise all they use, having the facilities and also the market for their butter. Very truly.—*W. M. Benninger, Walnutport, Pa., Dec. 10, 1894.*

CREAM OF THE PRESS.

Hard Hits, Bold Sayings and Patriotic Paragraphs from Reform Papers—They are Worth the Price of One Paper a Whole Year.

Grover Cleveland seems to have supplied the Democratic party with another issue—bonds.—*Tulare, Cal., Citizen.*

You can push the American people about so far, when something is liable to drop. The limit is about reached. *The Calliope.*

The amount of money in circulation has been diminished more than $100,000,000 during the last twelve months. —*People's Party Paper.*

The devil will be to pay, and no pitch hot, when the Rothschilds proceed to foreclose their mortgage on this country.—*Southern Mercury.*

The gold gamblers are determined that the public credit shall be maintained if the country has to "go broke" to do it.—*Topeka Advocate.*

Grover Cleveland has been trying to fill up a hole with bonds but the only thing that he has placed in the hole to stay is the Democratic party.—*Pittsfield Advocate.*

When eggs are twenty cents per dozen it is on account of McKinley's bill and when they are five cents it is on account of Bill McKinley.—*Council Grove Courier.*

The little merchants who vote with the fellows who are crushing them out of existence, are beginning to discover that there is something the matter.—*People's Tribune.*

The working man who opposes Populism belongs to the class for whom the Saviour prayed, 'Father, forgive them, they know not what they do." —*Arkansas Populist*

If we had a money that was not so confounded good in Europe, perhaps there would be less of it stolen and carried there by our public officials —*Murfreesboro Journal.*

The Standard Oil Company has swallowed the Chicago gas trust. In a little while we'll have to change the name of the United States to the "Standard States."—*Milwaukee Advance.*

Fifty two per cent. of the people own only 3 per cent. of the wealth of the country. These are poor people. Nine per cent of the people own 71 per cent. of the wealth of the country. These are rich people.

Working people will eat together, drink together, tramp together, suffer together, strike together, starve together and die together, but they cannot be induced to vote together.—*Rockville, Pa., Era.*

A sickening spectacle: A combination of foreign Shylocks exacting tribute from the United States Government. And worse yet, that our own people have no chance to supply the government's needs.—*Farm and Home.*

Necessity is an effective, though a stern teacher. Men who a year ago viewed as a crank anyone who advocated silver as money in any form, are now waking up to the error of their ways. Many of these men have been led by the depression of the past year to study standards of value. They have been surprised at the strength of the arguments for the bi metallic standard. It is only a question of time before not only the United States, but the world, will return to bi metallism.—*Farm and Home.*

STAND BY YOUR COLORS.

Cast your eye on the label of your paper and see if it gives you credit to '95 or '96. If it DON'T we shall expect $1 from YOU at once!

We want to pay every debt THE PROGRESSIVE FARMER owes this year, and enter '96 with all bills against us receipted and 50,000 names on our subscription list.

We *CAN* do it and *WILL* do it if our staunch friends will *HELP* us

Put THE PROGRESSIVE FARMER in every North Carolina home and reform is assured. NOW is the time to open the fight of '96 by rallying around your standard bearer—THE PROGRESSIVE FARMER

Experiments indicate that potatoes are worth about one fourth as much per bushel as corn if cooked and fed to fattening or growing swine, but this would not prevent us from throwing a few small potatoes or other roots to the growing stock, swine or almost any other animals. They serve the same purpose that they may serve for milch cows, they keep the stomach and digestive organs in good condition, and thus render the coarse food more valuable.