

PROPER ROTATION MAKES FERTILIZERS PROFITABLE.

Best Results Cannot Be Had Unless Attention is Paid to This Subject—Try a Three-Year Rotation of (1) Cotton; (2) Corn and Peas, and (3) Oats Followed by Peas.

I CAN WELL remember the time when the Long Leaf pine section of south Mississippi, unaided by manures and fertilizers, did not make, I believe, over one-eighth of a bale of cotton, or eight bushels of corn to the acre. I remember a time, as a boy, when a carload of bad-smelling material came into a town on the Mobile & Ohio Railroad, it was put into a store building where the people said a man had "busted" the fall before. A small boy, coming from school, ran himself out of breath to get home to tell his mama: "They say Mr. Tate busted down yonder on the corner, and I believe he did, for I smelt the awfulest racket that you ever heard of." Since that time I have seen the use of commercial fertilizers become universal, and I have seen the Long Leaf pine country become as productive acre for acre, as the Mississippi Delta.

Now, not only in south Mississippi, but over much of the Southern States a merchant or banker would not any more advance a man who would not plant fertilizer than he would one who would not plant seed. From a yield of one-eighth of a bale of cotton, yields went up to one-third, one-half, three-fourths, and a bale of cotton to the acre. Two dollars invested in fertilizers often raised the yield on an acre of land from \$10 to \$20 in value.

It was soon found that using a moderate quantity of commercial fertilizer alone and cropping from year to year helped the land to wear out slightly faster than it would have done if no fertilizer had been used. It was found that the very best results could be had by composting commercial materials with barnyard and stable manure, cottonseed, leaf mold, and other coarse materials affording plenty of humus. Pine woods farmers frequently raised their yield by the use of these composts to a bale and over to the acre. It is likely, however, that much unnecessary labor was performed in mixing these materials and re-handling them in great compost heaps.

Since Southern farmers produce so little manure, because their stock run out in pasture or in the woods for most of the year, not a great deal of farming land can receive dressings of farm manure. Therefore, some other scheme for keeping up the humus supply in the land and of getting extra nitrogen, must be resorted to. The three-year rotation of crops, practiced to a large extent by the Georgia and Louisiana Experiment Stations, gave magnificent results. This rotation consisted of (1) cotton, (2) corn and peas, and (3) oats followed by peas, with the use of moderate amounts of acid phosphate and potash salts. In a very few years, I remember, both of these Stations raised their cotton yields to a full bale and over to the acre, and other crops in proportion.

To practice this rotation on all of any farm would require dividing the farm into three equal parts. Then cotton would grow on one field, corn and peas on another, and oats followed by peas the same year on another. Each piece would be rotated independently. This scheme, as your excellent journal has frequently pointed out, will distribute the labor of men and teams more equally over the year, will enable one man to utilize much more land; will enable more live stock to be kept, more manure to be produced, and a

much more fertile and profitable farm to be made. I need only point to the fact that any one may verify with a little figuring, that at present prices, if 15 bushels of corn to the acre will pay all expense, 40 bushels to the acre will give almost 25 bushels clear profit, or say \$20 clear profit. This much profit on an acre of land is enough to justify a land value of \$200 an acre.

I want to emphasize just one other advantage about this crop rotation. I always found in Mississippi that where an oat crop is allowed to ma-

erable. In the spring, at exactly the right time for planting cotton, the land is listed up, leaving a balk in the middles, to mature clover seed on. A good stand of cotton is obtained, and it is worked until the clover seeds and dies, when the middles are broken out. With very little expense, then, we may have all of our cultivated lands in a pasture and cover crop, and in this way entirely compensate for the great tendency of Southern lands to lose their humus, and to wash and leach. To show the great harm that heavy rainfall and leaching may do lands, I need only to mention the fact that in Mississippi and the Southeast generally, sandy lands are most always naturally poor. In west Texas, where the rainfall gets down to 25, 20, and 15

bushels of peas, broke stubble, planted in rows 3 feet apart, used corn dropper, with a plate I made to suit my notion. Gathered 25 bushels of seed. In 1909 I planted crop for seed, May 25th, in order to gather before cotton opened. Gathered 52 bushels for seed, cut 15 tons of peavine hay from stubble sown, and can sell seed at \$2.25 per bushel today.

I consider peas to be the redemption of our lovely Southland. The idea of the farmer in the South in slavery time was to raise more cotton to buy more negroes. My idea is to raise more peas, to feed more cows to raise more peas.

F. P. GOLD.

No fertilizer will give good results on water-logged lands.



THE PROGRESSIVE PLOWMAN.

If it be true, as it is, that good farming is impossible without good plowing, it is equally true that good plowing is impossible without good motive power. The view given here was taken in the West, although scattered farmers throughout the South use a traction engine in their plowing operations. Most of us, however, must continue to use "Tom and Jo" or "Doll and Dapple", and with them we can do just as good plowing, if not quite so much of it, as can be done with the machine here shown. Two or three strong mules, or large farm mares to a good steel-beam plow—this is the sort of motive power we need, and the sort we must have. The one-horse plow must go; good plowing with it is simply out of the question.

ture and the grain is harvested and the land plowed and planted in peas, without being grazed closely after the oat harvest, that a crop of volunteer oats as thick as the hair on a dog's back comes up in the field after the peas are cut for hay in fall. This crop of oats is very valuable for pasture and for winter cover crop to prevent the land from washing and leaching. The other piece of the farm that is to be sown in fall oats will, of course, have a winter cover and pasture crop on it. Therefore, two-thirds of the farm, under this rotation, will be clothed with a green protecting cover crop each winter. Could we not afford to sow the other third in some crop, say between the rows of cotton following one of the pickings? I have here a rotation of cotton and bur clover, the bur clover occupying the land in winter and the cotton in summer. The clover can now be seen two miles away, if the field can be seen that far. It is affording excellent grazing, and the nitrogen it is bringing from the air will certainly be something consid-

er, sandy lands are immensely rich and when irrigation water can be applied to them are extremely productive.

W. C. WELBORN.

Texas Agricultural Experiment Station.

Sow Cowpeas for Seed.

Messrs. Editors: I know all farmers in the South cannot grow clover, alfalfa and other legume crops, but all can grow cowpeas. I know seed are high, and for that reason I wish to press upon your mind the idea of raising seed to use on our farms. Begin now if you have to pay \$3 for a bushel. This will plant 4 acres. Use acid and potash, 200 pounds per acre, as peas get lazy if you give them nitrogen. One bushel treated this way should yield 20 to 30 bushels.

But perhaps you will say, "My land is all planted to cotton." If so, you had better plow up some of it rather than to miss a crop of cowpeas.

In June, 1908, I had on hand 1 1/2



You Can't Smash a ROSE Buggy

It's too strongly built. There's nothing cheap about the "ROSE" except the price—and that only because we sell DIRECT to you. Ours are modern methods. Big sales, small profits and no middleman. We positively save you from \$15 to \$25 on each buggy.

Let Us Mail You Our Harness and Buggy Catalog Free.

Gives prices and tells about our many beautiful styles in Buggies and Harness. Also explains how we make, and why we can guarantee for 3 years, any Buggy selling at \$45.00 and upwards. We carry no buggies in stock. Every one is built specially to order. Sent on 30 days' free trial, anywhere in the South. If not pleased, return it at our expense and get your money back.

Ask for Catalog No. 9 Write us—today.

RANDOLPH ROSE COMPANY
Chattanooga Tennessee



LARGEST ORGAN FACTORY IN THE WORLD

Home of the Kimball Organ in Chicago, Greatest Factory of Its Kind.

The largest factory in the world devoted exclusively to the manufacture of organs is that of the W. W. Kimball Company of Chicago. The statement is proved by the tremendous number of Kimball Organs which are delivered into American Homes every year and by the actual floor space occupied by the great factory.

The name "Kimball" is known the length and breadth of the country in connection with organ manufacturing.

The fame of the product is shown by the fact that letters are daily pouring into the Chicago Office of the W. W. Kimball Company, 35 Kimball Hall of this city from every part of the United States asking for the new Kimball Catalog.

\$30 HAY PRESS Best farm press made, thousands in use. Over 400 sold in 3 months. For 10 years we've made them. Shipped on 5 days' trial direct from factory. Write for booklet.
WATKINS HAY PRESS CO., Atlanta, Ga.

FISH Our book tells how to catch dead loads of them where you failed the old-fashioned way. Write for it. We pay the postage. Ten thousand satisfied users in over thirty States.

EUREKA FISH NET CO.

Box 16 Griffin, Ga. and Dallas, Tex.



150 Styles in Big Free Catalog.

15,000 People Have Put Their On This Buggy. O. K.

Buy your Buggy and Harness direct from our factory and get it at first cost. No drummer's expenses, jobbers' commissions, wholesalers' profits and dealers' enormous profits are added to the prices of GOLDEN EAGLE VEHICLES. We manufacture and sell direct to users, and save our customers \$20.00 to \$40.00. We also sell Harness at cost as an advertisement.

Mail coupon to day for 1910 Catalog

Golden Eagle Buggy Co., Station 57, 144, 146, Edgewood Ave., Atlanta, Ga.

Gentlemen: Please mail me postpaid, your new 5-color 106 page catalog.

Name.....County.....

Post Office.....R. F. D. No.....

Get our Catalog now for Spring Buying.