

THE PROGRESSIVE FARMER.

Consolidated, 1904, with The Cotton Plant, Greenville, S. C.

PROGRESSIVE FARMER—VOL. XXI. NO. 22.
THE COTTON PLANT—VOL. XXIII. NO. 21.

RALEIGH, N. C., JULY 12, 1906.

Weekly—\$1 a Year

COWPEAS FOR EVERY ACRE OF STUBBLE LAND.

In traveling through the wheat-growing section of the State one can not fail to be struck with the evident fact that much more of the stubble land is being sown to cowpeas than was the case a few years back. There ought not to be an acre of wheat or oat stubble left to grow up in weeds.

In last week's issue of The Progressive Farmer Mr. McDowell of Mecklenburg, wisely calls attention to the importance of a rotation of crops and of the value of the cowpea in the rotation. In a later issue we shall discuss this question of rotation, but at present we wish to restate a few old facts about the value of the cowpea. These facts are known, but not practiced to the extent which our soil conditions demand, and it may strengthen the faith of some or induce others to make greater efforts to overcome the difficulties in the way of increasing the acreage in cowpeas to go over some of the ground again. For there are real difficulties in the way of many farmers sowing all the cowpeas they should. Frequently the land is hard and difficult to break; other work is pressing and work stock is short or run down from the cultivation of the corn and cotton; or seed is scarce or high-priced because of the neglect or expense of gathering or harvesting the peas. None of these difficulties would be insurmountable after a year or two of real effort to overcome them, providing this effort were backed up by a full appreciation of the value of the crop.

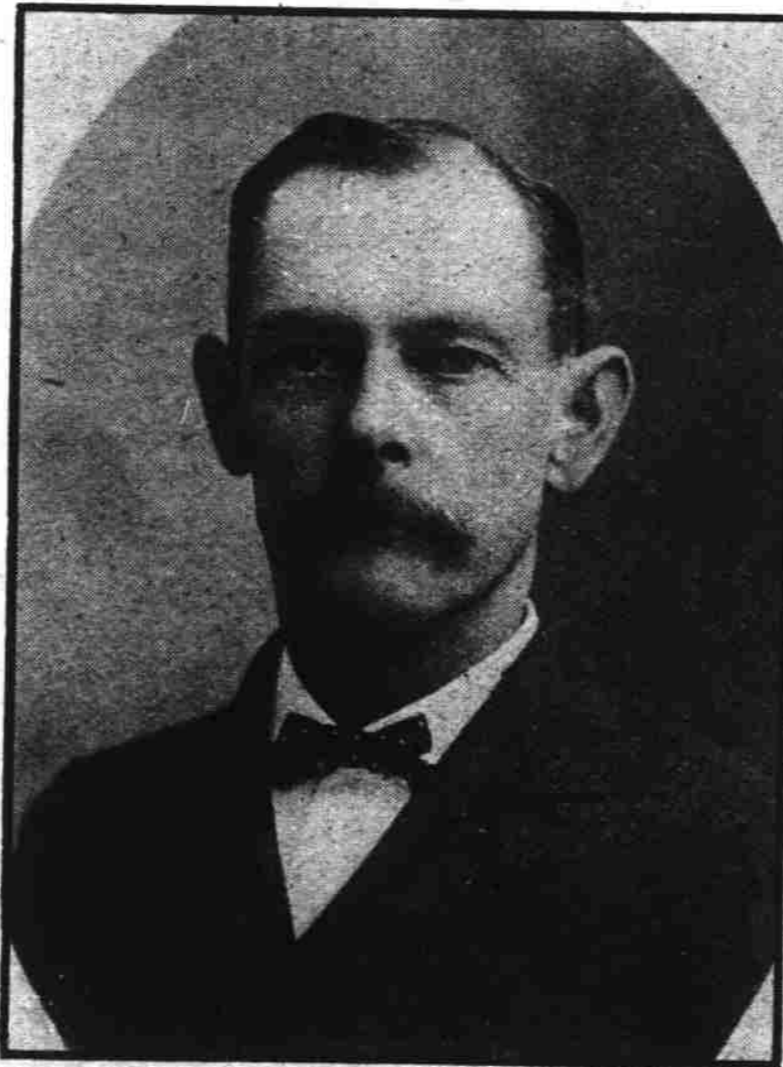
\$12 Worth of Fertilizer for \$1.

There is much difference of opinion regarding the economy of sub-soiling, but practically none concerning the advantages of deepening the soil by gradually increasing the depth of plowing. Even when sub-soiling increases the yield of subsequent crop it does not always do so sufficiently to pay, for sub-soiling is expensive work. But the cowpea pierces the sub-soil with its deep roots, brings up phosphorus and potassium of which it requires large quantities in its growth, loosens up the soil and leaves in it large numbers of roots which decay and furnish humus and plant food; thereby in a large measure serving the purposes of both sub-soiling and deep plowing.

The above are certainly not unimportant reasons why the cowpea should be sown this month on all stubble lands. But there is still the old and better known reason. In a ton of pea-vine hay there will be not far from forty-five pounds of nitrogen, while in the stubble and roots left in the soil there will be another fifteen pounds. This would cost in the market about twenty cents per pound, or a total of \$12. The proportion of this sixty pounds of nitrogen which is taken from the air will depend somewhat on how much there was available in the soil, but on most of our lands it will have come largely from the air. It would have cost \$12 if bought in commercial fertilizers, what will it cost the farmer to gather it from the air through the help of the cowpea? Three or four dollars at the outside.

Still another reason for cowpeas must not

THEY WILL WELCOME YOU THIS WEEK.



MR. C. C. MOORE,

President of the North Carolina Farmers' Convention, now meeting in West Raleigh, N. C.



PROF. A. M. SOULE,

Secretary of the Virginia State Farmers' Institute, now in session in Roanoke, Va.

be overlooked. A pound and a quarter of cowpea hay is worth a pound of wheat bran, and we buy thousands of tons of wheat bran at from \$20 to \$25 per ton. But, if there is too much trouble in saving the hay, suppose we grow them anyway for the nitrogen they gather and then just let a few good hogs graze them. Do we need the pork? It seems so, for we buy hundreds of thousands of dollars worth every year. Duggar, of Alabama, got \$10.65 worth of pork from an acre of cowpeas, with live hogs selling at three cents per pound, and at least fifty of the sixty pounds of nitrogen referred to above was still left on the ground. This is, of course, too high a grazing value to expect from an acre of cowpeas, but \$4 to \$5 per acre is not too high, and that ought to be enough to induce us to try to overcome some of the difficulties imaginary or real which we are going to allow to prevent covering up that stubble field this month. But let us stop this theorizing and get down to facts; real, practical facts. Perhaps we don't want to make hay and don't intend to be "pestered" with looking after those hogs. We just want to sow wheat or plant corn or cotton on that field again next year as we have been doing for the past five or—well, we won't say how many years.

\$20 More Cotton Per Acre.

Will the increased yield of wheat, corn or cotton, as the case may be, pay for the effort it will take to overcome the difficulties you had concluded to allow to prevent your getting that stubble field into peas this month?

Duggar, of Alabama, found as an average of four tests that plowing under the peas gave an in-

creased yield of seed cotton of 567 pounds per acre. With lint cotton at ten cents per pound and cottonseed at \$15 per ton, that is a return of over \$20 increase in the value of the cotton crop.

With corn, the same experimenter got an increase yield of 20.3 bushels per acre where the whole plant was plowed under and 11.4 bushels per acre increase even when just the stubble and roots were left on the land.

And Your Land Needs the Humus.

As if this was not enough, this same experimenter tells us that "the largest percentage increase from either the vines or stubble of cowpeas or velvet beans was made by wheat and fall-sown oats."

Yes, we are convinced that it will pay to sow that stubble field to cowpeas and put cowpeas in the corn, but will we do it? Remember that plant food, which may be supplied in commercial fertilizers, is not all your land needs. It needs humus, and the cowpea will furnish this most cheaply.

TAIT BUTLER.

What Can Denatured Alcohol Not Do?

The industrial possibilities of free denatured alcohol are not confined to its uses for heating, lighting power and solvent purposes. It promises to make of value many products of agriculture. Thus the stalks of the cotton plant may be utilized for the production of industrial alcohol, and a company headed by Harvie Jordan, President of the Southern Cotton Association, is being formed to develop this possibility. The company is also said to have acquired a process for converting the fibre of the cotton stalk into paper after the alcoholic element has been extracted. Such a development would add far more to the annual value of the cotton crop than did the discovery of the value of cottonseed for the production of oil and fertilizer.—Springfield Republican.