

NITROGEN FROM THE AIR.

Congressman Faison Introduces Bill Appropriating \$350,000 for Testing Best Method of Extracting Nitrogen From Air.

Washington, D. C.—Representative John M. Faison of North Carolina, has introduced a bill in Congress asking for an appropriation of \$350,000 for the purpose of testing the best and cheapest methods of obtaining nitrogen from the air for agricultural purposes. He says that the present supply of nitrogen or ammonia, which comes largely from it is not only becoming exhausted, but is prohibitive in price because of the distance of the distance of transportation and because of trust manipulation. He says the trust controls the output of the mines and has been gradually increasing the price until now it costs the farmer about \$6 a ton. This product contains only 19 or 20 per cent ammonia.

The electrical process, he declares, needs only electric power, air, water, and limestone. Electrically heated air is cooled rapidly over pulverized limestone, the result being calcium nitrate. This nitrate is manufactured at a cost of 50 to 80 cents a ton, much cheaper than the Chile salts can be mined. The electrically manufactured nitrates, it is claimed, contain 17 per cent ammonia and make an ideal fertilizer. The experiment has been successfully tried in Norway. Representative Faison would have the government lead the way by determining the best methods of manufacture and protect the process from private appropriation.

Another appropriation asked by Representative Faison is \$50,000 for testing the best electrical methods of obtaining a larger per cent of acid phosphates from phosphate rock by baking such rock in high-temperature electric ovens. Heretofore, he says, phosphate rock has been mined, crushed and treated with sulphuric acid for extracting in soluble form acid phosphate for plant food. By such chemical treatment only 16 per cent of soluble acid phosphate has been rendered available for plant food, the remainder being insoluble. A quantity of free sulphuric acid remains in the commercial acid phosphate, which sours the soil and retards plant growth. Application of lime to the soil corrects this, but stops the possibility of solution of the remaining 84 per cent of phosphate in the phosphate rock.

The electrical method, it is said takes out of the rock 40 per cent of acid phosphate with no sulphuric acid left to retard growth. The fertilizer's plant food is increased in value 250 per cent and no expense for liming is necessary.

Fine Beets and Turnips.

At the fair last week Charles Dellinger exhibited some very fine sugar beets which he says he finds can be grown with success in this section. They have a splendid flavor and according to his liking beat all other beets.—McDowell Progress.

LESS MOONSHINING THIS YEAR.

More Blockading in Oleomargarine Than in Liquor Now.

Washington.—The next annual report of the Commissioner of Internal Revenue will show a slight decrease in the number of illicit distilleries seized and destroyed and reported for seizure in North Carolina over the last report.

The figures are: for 1913, reported for seizure 446; seized and destroyed, 250.

For 1912, reported for seizure, 486; seized and destroyed, 267.

The coming report coincides with the views of North Carolinians who have recently visited the State. Representatives Webb, Doughton, Guder and Page, the four Congressmen from the State who have mountain counties, say that there has been a great change in sentiment in the old moonshining centers. The persons who once thought that they could not earn a living without making "moonshine" liquor are now turning to other enterprises. The school house is taking the place of the still.

Blockade Oleo.

The next report of the Commissioner of Internal Revenue will show that oleomargarine blockaders are far more numerous and active than Southern liquor makers.

CROP ROTATION HELPS LAND AND GIVES VARIETY OF FOOD.

In our farming operations it must be remembered that crop rotation is an important object if we desire to keep up or improve our land, and at the same time insuring a larger profit. If farmers would only practice a regular yearly system of crop rotation best adapted to the nature of their farms and themselves would be handsomely benefited by the process. What is meant, is to grow such crops in rotation which the soil is best capable of producing. It is a well known fact that every farmer desires (and it's to his interest) to try and keep up or steadily improve his farm. I can not recommend any easier or quicker method which will have the desired effect than a regular systematic rotation of crops, in both regular farm crops and legumes or forage crops.

Never crop the same land year after year with the same kind of crop, as this method when practiced will kill or ruin the best land in a very short period; but use a crop rotation system. Not only is the soil kept in better condition or order, but rotation encourages crop growth, causing them to produce a larger yield and better quality, therefore increasing our profits. We must have fields so arranged to produce moneyed crops one year and the next in a soil improvement crop. By such rotation we are improving a certain portion of the farm annually. Of course, we can grow if desired (and is best) a moneyed crop, and also soil improvement crop the same year, as where crimson clover is fallowed under in the spring will

produce fine corn, tobacco, or cotton, and will not injure the land nearly as much as when left idle or not cultivated until another year.

Of course, by using different manures and fertilizers and growing the regular farm crops in rotation, the soil can be kept up to a fairly good state of fertilization; but it is advisable and essential to sow a legume or soil improvement crop in such fields at least once in every three years, and turn under in a green state. Where the regular farm crops are used only in rotation, the soil has a tendency to become close, and in a packed condition, but by using a legume crop occasionally the soil will always be kept more or less in a loose or mellow condition, also being enriched, furnishing humus and plant food so much required for the growing crops.

At the last cultivation given the crop I find it important and profitable to sow a crop which will act as a covering during the winter. Several advantages will be derived from such a cover crop practice. First it furnishes shade for the soil, and keeps it from washing or leaching so badly. Second, it will help to retain the moisture in the soil in a droughty season, and will also add to its fertility. Third if the proper kind of crop is sown will furnish some winter and early spring grazing for cattle and sheep, which must not be overlooked. For this cover crop I highly recommend crimson clover, and think it most suitable to meet all of the above requirements.

There are a number of different kinds of crops that may be used for this purpose, though prefer crimson clover and deem it decidedly the best and most profitable, as I know from experience that it is one of the best soil builders that can be grown. Rape, cowpeas, soja beans and vetches are good crops to be used in rotation, and fallowed under in a green state, as each one will add greatly to the fertility of the soil. Such crops turned under in the green state furnish plant food in its decay, and after decayed or rotten retains the moisture in the soil, without which it is impossible to grow any kind of crop.

Rotation of crops also means a good deal more of different feeds produced, which saves the extra cost of buying. This bountiful supply of feed also means more and better live stock, which also insures more plant food to be returned to the soil, which in the end certainly means more profit and enjoyment for the farmer. Use a regular system of crop rotation, and stick to it. You will never regret it, but will find your farm far more valuable and profitable. In our farming operations we must have objects in view, such as the planting or sowing of crops which will increase the fertility or make our soils more productive while growing them, and also to select those which we can get the most profit from.

Working in a systematic way so as the business will not be a burden or drudge, but an enjoyable and most pleasant operation.—Andrew M. Soule in Atlanta Journal.

High-Pressure Farming.

These days, when machine farming of big areas appeals more and more to nearly every young farmer about to begin for himself, there is special interest in what is being accomplished on little farms, says Farm and Fireside.

One coming under this category is located in Saluda county, South Carolina, owned and operated by R. B. Watson and sons. The farm contains, all told, only fifteen acres. About one acre is occupied with the house, barn, carriage-house, packing-house and yard; also, one and one-half acres under tillage was about to be drained when this report was secured.

Mr. Watson, Sr., has passed his seventy-sixth milestone, and he and his life partner have made their matrimonial journey together for fifty years, living where his forebears have lived for five generations. His interest and delight in making his little home place productive and profitable has not lessened a whit with the passing of the years. Some idea of Mr. Watson's physical fitness for farming might be understood from the fact that he had just returned from a horseback ride of forty-five miles from a religious convention at the time this account was placed on paper for Farm and Fireside readers.

His Motto: "Intensify and Diversify." The soil of the little farm is sandy loam overlaid clay, and the greater part is rich in plant-food and vegetable matter, kept so by systematic fertilizing, for the most part with stable manure, and good culture, through a half century of steady intensive production. The motto "Intensify and Diversify" was long since adopted on this farm. Cows, hogs and poultry are kept in such numbers as prove most profitable, combined with fruit, truck and anything that will turn a profitable penny.

Two good cows, Berkshire swine and pure-bred poultry were kept during the year comprising this report, and the sale of weanling pigs, eggs for market and hatching milk and butter materially helped to swell the income. The catch and cover crops, refuse from truck crops and stubble gleanings were sufficient to materially reduce the feed-bills. Rye and barley, sown following truck and grain crops, furnished green feed from October to May for cows, hogs and poultry. Then grass, sorghum and green corn provided soiling feed until fall. In addition, the poultry had access to stubble-fields, sorghum and sunflower seeds, chufas, etc.

From the stock kept fifty loads of rich manure was saved under cover, which, with the aid of cover crops turned down, made unnecessary the heavy expense for commercial fertilizer.

In making up the account of the operations of his little farm, Mr. Watson made no record of the large number of chickens and eggs and the generous quantity of butter consumed for home use in his large family. The book ac-

count of credit and debits for the year follows:

Sales.	
Peach trees (600 trees).....	\$2,445.25
Poultry and eggs.....	567.50
Berkshire pigs.....	187.50
1,075 lbs pork.....	80.62
150 bu. corn.....	112.50
106 bu. oats.....	74.20
Rye.....	9.00
100,000 asparagus roots.....	200.00
Milk and butter.....	109.25
Beans.....	14.25
Irish potatoes.....	5.05
60 bu. sweet potatoes.....	30.00
Strawberries.....	7.25
Fadishes.....	10.00
1 1-2 tons pea vine hay.....	22.50
Sorghum-hay.....	23.00
Premiums won at fairs on corn, poultry and hogs.....	104.65
Profit on cows bought and sold	54.00
1 bale long-staple cotton (not sold) estimated at.....	50.00
Total sales.....	\$4,116.52
Expenses.	
Labor.....	\$286.50
Feed for stock.....	239.25
Fertilizers.....	60.50
Crates.....	252.00
Cost of exhibits stock at fairs.....	30.00
Total expenses.....	\$868.25
Net income.....	\$3,248.27

This shows a net average income for the year of over \$230 per acre.

To Mark Trail of Daniel Boone.

The General William Davidson chapter of the Daughters of the American Revolution, of this city, will join with the national organization in marking the trail of Daniel Boone from North Carolina to Kentucky and on to Missouri. The local chapter is planning to place a marker at Boone's Cave on the banks of the Yadkin on Saturday, October 25th. There will be interesting exercises at the cabin. Several of the state officers of the D. A. R. will be present and there will be an address by Rev. A. W. Plyler. Mr. J. Ray McCrary, of this city, has been invited to deliver an address and has signified his acceptance. He is the logical man for the job, owing to his deep interest in all things pertaining to Daniel Boone. Mrs. Lindsay Patterson and Mrs. W. R. Reynolds, of Winston-Salem, who directed the dedication of the Boone tablet at Huntsville last week, have been invited to attend the exercises at Boone's Cabin. Mrs. S. W. Finch, regent of the local chapter, will preside. The exercises will begin at 1:30 o'clock, p. m.—Lexington Dispatch.

New School Building.

An act was passed by the General Assembly at the special session providing for the calling of an election to be held for the purpose of voting on the question of levying a special tax to construct a new school building in Old Fort. The bill provides for a structure to cost not less than eight nor more than twelve thousand dollars.

WARNING TO LAWMAKERS.

Dr. Shaw Will Use Influence Against Lawmakers Opposing Woman Suffrage.

Washington.—Defeat for re-election of all who oppose the adoption of a constitutional amendment to assure nation-wide woman suffrage, including senators and representatives in congress and members of the state legislatures, is the avowed object of Dr. Anna Howard Shaw, president of the National American Woman Suffrage association.

Dr. Shaw made this announcement after a conference on the subject today with Washington suffragists. She will inaugurate her campaign at Lynchburg, Va., next Friday night, when she will address the Virginia Suffrage league, and proposes to continue it before other suffrage organizations in various cities.

Plans for the convention of the National American Woman Suffrage association, to be held here in December, were considered at the conference. Action on the constitutional amendment will be the principal feature of the convention.

In a statement today Dr. Shaw denounced the detention of Mrs. Emmeline Pankhurst, the British suffragette leader, at Ellis Island, characterizing it as "ridiculous in the extreme."

The only effect upon woman suffrage in this country Mrs. Pankhurst's coming could have, she said, would be to arouse sympathy for the cause.

\$25,500.00 IS SPENT BY FARMERS ON FERTILIZER.

More Used in Season Than Ever Before Except in 1910-11

Approximately \$25,500.00 was expended in Georgia for commercial fertilizers during the period from October 1, 1912, to October 1, 1913 says the Atlanta Journal. More fertilizers were used in the state during the past season than in any other season of the state's history, except that of 1910-11 which broke all records.

During the season of 1910-11 the state consumed 1,202,722 tons of straight fertilizers and 129,748 tons of cotton seed meal. This last season it used 1,120,693 tons of straight fertilizers and 122,979 tons of cotton seed meal.

At the very conservative estimate of \$20 a ton the farmers invested during the season just closed \$22,415,860 for straight fertilizers. Figured on an average price of \$25 per ton they invested \$3,074,375 for cotton seed meal. The state collects a tag tax of ten cents on every ton of fertilizer and cotton seed meal sold in Georgia, and these fees during the past season aggregated \$124,366.

A comprehensive report on the sale, use and analysis of fertilizers used in Georgia has just been issued by the state department of agriculture.

THE COMING SENSATION

"THE LEOPARD'S SPOTS"

By Thomas Dixon, Author of "THE CLANSMAN"

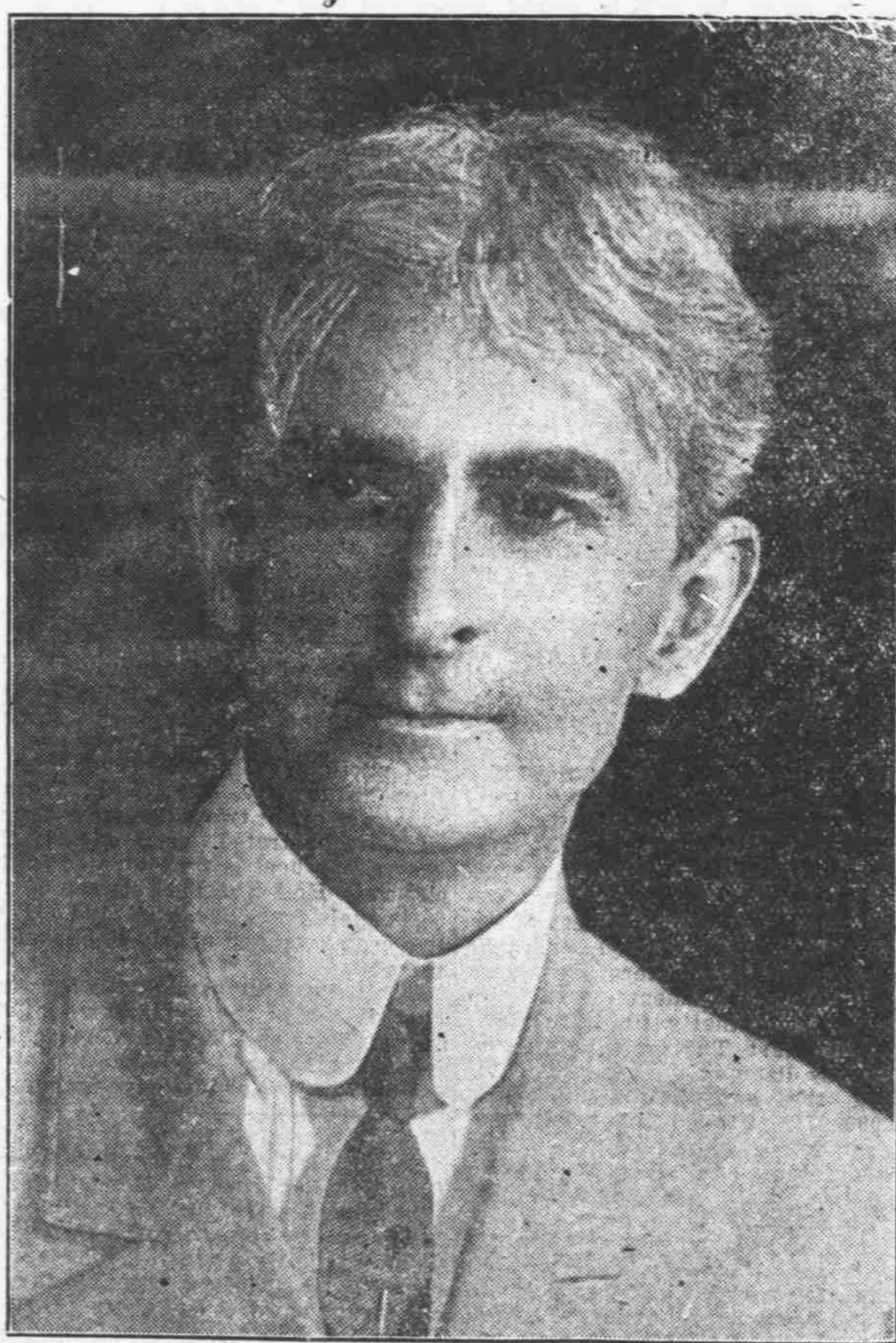
The Leopard Spots is the only attraction in America that can play North Carolina five solid weeks. Dramatized and directed by the Author.

The same cast and production that is playing all the large cities, Greensboro, Wilmington, Charlotte, Salisbury, Durham and Raleigh.

The production of The Leopard's Spots is the greatest national event of the year 1913.

---Senator Vardaman, Miss.

BIGGER AND BETTER THAN "THE CLANSMAN"



THOS. DIXON, AUTHOR.

ONE NIGHT FRIDAY, OCT. 31

Tickets on sale at
Hunter's Pharmacy
Tuesday, Oct. 28th

Curtain will rise at 8:30 sharp to enable merchants and clerks to reach theatre in time.