COTTON PLANTERS

and the second

Words of Wisdom From the Agricultural Department.

by Herbert J. Webbert physiologist in charge of the plant breeding laboratory in the department of agriculture, on "improvement of cotton by seed selection," in the year book of the department of agriculture, published today, contains auggestions which, if generally adopted, would lead to a large increase in the cotton production of the United States. The extent to which it is possible by the adoption of ssienific methods is shown by the fact that, while the average yield of cotton in the United States is only about 190 pounds of lint per acre, yields varying from 500 to 800 pounds per acre are frequently obtained on many large carefully cultivated tracts. Mr. Webber does not believe that is possible to greatly increase the acreage devoted to cotton in the United States. He says there is little opportunity for extending the industry into new regions, and while a much larger acreage of cotton could be grown in the old cotton producing States if necessity demanded it, there is a tendency these States toward diversified farming rather than further specialination in cotton production. He concludes, therefore, that the most important problem now before cotton growers seems to be that of increasing the production on the same acreage rather than extending the acreage itself. He thinks that while cotton growing in other countries is capable of being considerably extended, such extension will doubtless be slow and will only slightly affect the industry in this country, and that the American planter should strive, by the apelication of improved methods and machinery and the use of improved varieties of cotton, yielding more and better staple, to keep well in advance where cheaper labor is available. Mr. Webber recognizes that the

character of the soil is the factor of reatest importance. He believes, however, that there is great opportunity of improving Tthe industry on all lands, both good and poor, and he esdoubled on the same acreage now would normally be expected to progrown by proper attention to two fac- duce a much larger crop in the boll tors necessary to success, namely, the weevil district owing to this fact. universal use of good seed and careful methods of tillage and fertilizing.
While both of these factors contribute largely to success, Mr. Webber be-lieves that the importance of good seed is probably more sommonly over-looked than the pratter of cultivation. lis observations show that fully half he planters use seed taken at random rom public gins, about which they mow nothing other than that it was produced somewhere in the same viinity, and he says: "As well might he breeder of fast trotting horses inroduce dray animals into his stables, the breeder of intelligent hunting logs introduce ordinary mongrel ours to his kennels. The use of good eed and its production by a regular stem of selection is just as imporant a factor in the production of the rops as that of cultivation. No inelligent method of farm management isregards the production and use of ford to plant my sort of cotton seed as passed. Only seed of a known nditions, should be planted.

The traditional belief that an occa-ional change of seed is necessary if od crops are to be regularly secured attacked by Mr. Webber, who connds that to secure the best results lants must be bred and adapted to oil and climatic conditions, and that otton planters and growers of the ceal crops as well, if they are to obin the best results, must select their ed in the locality where it used to regularly grown in order to adupt it the particular soil and climatic con-

The paper outlines a system of sesracters unchanged, and the stabilspecies depends upon this law of eredity, still they are not absolutely red and stable, but are very unstae and highly variable in minor of itters. The system outlined, which one that any planter can carry out tate is comparatively of low value. his own plantation, is based on the of the seeds of only such plants show the characteristics which it is

Washington, June 24.-Av article ; test its quality for the reproduction of the qualities desired to be perpetuated. All plants that do not come up to the standard are to be discarded in the second year and the seed of only the very best are to be used for planting the third year. By the beginning of the fourth year a sufficient supply of highly selected seed for seeding a large plantation will be obtained. The system of selection can be indefinitely continued, however, from year to year on a tract of ground set apart for that purpose, and thus the quality standard or constantly improved. Mr. Webber makes an important

suggestion as to the possibility of combating the Mexican cotton boll individual plants, in badly infected he has never known before. fields, that had set and matured almost all of their bolls, while adjoining plants were almost denuded. Whether such plants possess a degree of resistance or not, and whether this possible resistance will be transmitted to their progeny, he says, remains to be determined, but he thinks it probable that some plants may be discovered ful to the weevils. He tells of exper- both. iments in Texas in 1901 and 1902 with varieties of Egyptian cotton for the purpose of noting the effect upon them of the boll weevil. The weevil was found to be destructable of all varieties observed except the Mit Afifi cotton. Three acres of this variety were grown on land where the crop had been destroyed by weevils the previous year. About two hundred feet distant was a small patch of upland cotton. The weevils appeared on the rent for from \$60 to \$100 per acre, upland cotton early in the season and | while hay sells at \$10 per ton. of competitors in foreign countries almost entirely destroyed it. They did not appear on the Amit Afifi until the middle of October and damaged it very little. The Mit Afifi yielded about 1,066 pounds per acre, while the upland variety yielded about 200 pounds per acre. This was in spite of the fact that the upland cotton was timates that the cotton crops could be much earlier than the Egyptian and

GRASS CULTURE.

The Value of Agricultural Lands Europe and America.

To the Editor of The News and Courier: You have printed in the past two weeks extracts from Mr. C. W. Howard's work on grasses and forage crops in the South, showing the one great advantage to be gained in the cultivation of alfalfa or Lucerne and Bermuda grass is that once established in the ground they remain for dependence. years, giving a large return each year, with small expenses for the cutting and curing, and only requiring replenishing with fertilizer every third year. Following up these statements, Mr. Howard has this to say in reference to the benefits of grass culture:

"A planter owning 1,000 acres" of fairland in the South is a poor man. ood seed, the day when growers can He could not sell his land probably for more than \$5 to \$10 per acre. He looks North and finds land ranging ariety, selected because of its desira- from \$50 to \$200 per acre, while in le qualities and adaptability to local | England, Holland and Belgium it is worth from \$300 to \$500 per acre. Why this difference?

In the United States, if we put our finger on the States or parts of States in which land sells at the highest price, we shall find that there the greatest attention is paid to the cultivation of grasses and forage plants.

In Europe the same rule holds good. The cheapest lands are those of Spain, where little attention is paid to grasses. The value of land vises exactly in proportion to the attention which is given to them; in England and Holland reaching sometimes to \$1,000 per acre for farming purposes. ction based on the principle that, This land value culminates in Lomhile plants reproduced their main bardy, where irrigated meaders lands rent for from \$60 to \$100 per acre. of the cultivated plants and natu- Without exception in Europe and America, where a large portion of land in in grass or forage crops, the price of land is high. On the other hand, wherever on either continent the grasses do not receive attention landed as-

The conclusion is irresistible that a large attention to the cultivated grasses is essential not only to improved sirable to revroduce. such as quan- agriculture, but also to a high value ty or production, length of abre and of land estate. Where this occurs cliness of maturity. It is recom- there must be large numbers of horses ender that after these plants have or mules, cattle and sheep. These con carafully selected the seed from provide au abandance of manure. e middle pickings of each plant be Where there is an abandance of maaned reparately in a gin that has nove there will be large crops. Where girture of unselected seed, and that uable. These results follow from the

dividends without labor on our part.

If we cultivate cotton or corn we must put down the land in grass the work all will continue to be "peanutters' is done for a number of years. If it until the end of the school year. yields only a ton of hay to the sere, and its salable value be only \$20 per which is 10 per cent on \$150, the actual value of the land. The only laand baling the hay. With the horse this was considered a nominal amount, mower, tedder, rake and hay lifter it was all that Coulombe cared to ton. What is the difference between the Southern plantation and the Beigium farm? It is this: Two-thirds of the latter yields a handsome return of the cotton can be kept up to a high without labor, while not an acre of the plantation pays a cent without the use of costly labor. A small, well manured and well cultivated area of land in cotton and cereals, and a large weevil by seed selection. In examin- proportion in forage plants and grassing fields of upland cotton in different es, would give to the planter a pleasparts of Texas he observed occasional ure in his business and a profit which

There seems to be little to choose as to climate at the South. In each of the plantation States we have three failed, and inside a few days he was different climates-that of the moun- living entirely upon nuts. He found tains, the middle country and the coast. For live stock the mountains have the advantage in the summer, the low-country in the winter, while the middle country has a share of and propagated which will be distaste- the advantages and disadvantages of

The lands most likely in the judgment of the writer to produce heavy crops of Timothy and herds grass hay are the rice lands of the coast. They are very rich and have ample command of water. If the rice planters would apply to the land the agricultural system of Lombardy they would attain a value of which they have not dream-

ed. The Marcite lands or lands in grass, irrigated in winter, near Milan. To young men at the South entering

a return must be had the first year, grass seed can be sown with small grain-the whole expense is then the are for reading, study and the ties of social life.

Sound political economy requires that the South should raise its own horses, mules, cattle, sheep and hogs, and produce its own wool, butter, cheese and hay.

When we add these productions to our cotton, rice and sugar we shall perhaps live more independently than had no trouble in excelling in runany other people in Christendom. Grass culture is the basis of this in-

The well known authority of the late Mr. C. M. Howard on this subject should be all that is needed to induce the more enterprising farmers of the State to lay down some land in these two crops, following carefully the instructions given as to the way of planting and their subsequent care, beginning on a small scale, and seeing themselves that the preparation of the land is thorough and the directions carried out, and not leaving it to some field hand, as was done last year by a interested, decided that they needplanter who procured alfalfa seed and gave it to one of his careful hands to plant, finding out afterwards it had been sowed broadcast and ploughed

In confirmation of the good advice given by Mr. Howard it is only necessary to refer to the grass farm in this State, near Augusta, Ga., formerly owned by Mr. Moore and now owned by Mr. Warren, of Augusta, which has been in grass for the past fifty to sixty years. Previous to 1860 there was just 100 acres in grass, and was stated by Mr. Moore to have paid an average profit each year of \$6,000 for a number of years previous to his death. There are no doubt many others that could be shown if the facts could be made public.

The year book of the department of agriculture for 1902 shows that the average yield of hay in South Carolina for the year 1900 was 1.32 tons per acre and the State of New York 81. 100 of a ton; while the crop for that year was 176,000 tons, worth \$1,978, 000, and the State of New York made 3,350,000 tons, worth \$47,000,000.



- The more a man knows the easier it is ice him to keep his mouth shut. - When a woman goes to the races on carafully cleaned so as to prevent there are large crops land will be val- she can't help wondering why the men are so foolish as to bet before the o seed of each plant be planted sygrass crop as the first causy. horses are nearing home
grately the following yest so as to The advantage of investing money see which one will win. horses are nearing home, so they can

in stocks and bonds is that we get our Lived on Peanute for Three Months.

hire hands, buy mules, corn, hay, ba- students of Norwich University, three con and pay blacksmith hills. If at of whom are working their way through the end of the year these expenses ex- college, have in the last three months ceed the sales the land has been worth saved at even \$30 each by deserting less than nothing to us. If there the fraternity "bashboase" and livshould be a small profit after all our ling on peanuts. Every one of the expense and trouble, then the land quartet is in better health than when has a small value to us. But if we he started in on the strange dist and

The peanut idea originated with J C. Coulombe, '05, whose home is in ton, with expenses of \$5 for curing Island Pond, in the northern part of and selling, we have a net profit of \$15, the State. Coulombe is a member of the Theta Chi fraternity and lived in the "frat" house, where they served bor in the case is the cutting, curing fair meals at \$3.50 a week. While this expense is not more than \$2 per pay, as he has to depend on what he can earn through the summer to take him through the rest of the year.

While studying the efficacy of foodstuffs one day he discovered that the maligned peanut was in truth a highly nutritious affair, easily shucked and easily digested. It occurred to him that he might at least make two meals a day on nuts and fill up on the 'frat' house diet of ham, beans and prunes for the third.

He therefore went to the village and laid in a supply of well-roasted nuts. His first meal was so satisfying that his appetite for the second that a quart and a half served his purpose for twenty-four hours, and that by buying the nute by the sack he could cut down his board from \$3.50 a week to an even dollar.

Coulombe plays first base on the varsity nine, and his fellow-students were not long in finding out that he had improved over last year and that he seemed stronger and better in every way. Professor E. A. Winslow, instructor in civil engineering, also noted that the young man improved in his studies.

Coulombe laid the improvement to peanuts, and in a short time three other students adopted the diet. Inasmuch as Coulombe was the originator of the idea, he declared that it would be only fair for his followers to buy their nuts of him, and he agreed upon agricultural life grass farms of- to give them all they could eat for \$1 fer great inducements. They require a week. There was quite a margin in so little labor and so little outlay. If the deal, and now Coulombe practically gets his living for nothing.

The three who joined the original 'peanutter' are Edward Moore, of cost of the grass seed. Afterward the Island Pond, Joy Clyde Rose, of Imfarm will provide for all its own ex- lay City, Mich., and Park Valentine, penses. The pleasure of life on a of Bennington, Vt. All are members grass farm is incomparably greater of the class of 1905 and all a Theta than on a plantation devoted exclu- Chi men and are taking the civil engisively to cotton. The latter exacts neering course. Moore is one of the our whole time; the former gives leis- best basket-ball players in Northern ermont. Rose excels at tennis and Perkins is strong enough to sit up six nights out of seven and play casino. Perkins is the only one who is financially independent.

Tests in the gymnasium proved that the peanutters could stand more hard work than their fellow-students, and when they went into field sports they ning, ball, tennis and feats of endur-

When the experiment was started the men indulged in one cup of coffee a day, but this was soon discontinue.' as it was found that the oils in the coffee and nuts did not agree and indigestion resulted. All alcoholic stimulants were, of course, barred, and the men continued on a strict diet of nuts and water.

At the end of the first month the peanutters" got their first setback. They began to feel tired and dull, and President Brown, who had become ed albumen. He searched his brain a while and then advanced the idea of eggs. Good, big, fresh ones, such as Admiral George Dewey used to delight in when he was a student at the university, were bought, and after a little experimenting it was found that the president had hit the nail on the

Six eggs were allowed to each man a week. They were taken three at a time and cooked or devoured raw, as the devource liked. Sunday and Thursday were set apart as egg days, and they were hailed with joy whenever they came around. The eggs apparently satisfied all longing for change in diet, for the men, issiead of complaining, declared that they would not return to "frat" house far: if they were paid for so doing.

Ja the last twelve weeks the men have increased in weight an average of fifteen pounds. They have smaller waists, broader shoulders and larger expansion of the chest. The biceps have also developed and they have hardened all over. They all deslare that they can go on eating peanuts indefinitely, and will return to the diet when they get back to the university in the fall, if they do not continue all summer. The faculty is beginning to wonder what it will do with its cookstoves if the habit becomes more general—as it promises to do in September.—St. Louis Re-

Stops Cough and Works off the Gold. Laxative Bromo Quinine Tablets cure a cold in one day. No Cure, No Pay. Price 25 cents.

The South Carolina College. The South Carolina College in roun

The South-Carolina College incounding-out the first century of inscriptions and will celebrate its century of inscriptions and will celebrate its century of inscriptions and will celebrate its centuring in Iss. The College was chartered in 1821 and opened for active work in January, 1825. It owes its existence to a patriotic purpose, the education of all the youth of the State at a common center, "in order to promote the instruction, the good order and the harmony of the whole community," and it was built from a portion of the proceeds of a reimbursement made by the United States to South Carolina for expenses incurred in the Revolution. During the century that is closing the College has contributed largely to the statesmanship, the patriotism, the learning and the high moral standards that have prevailed in South Carolina and her sister States. The roll of College Alumni contains the names of men who have become noted in all the purpose. and her sister States. The roll of College Aiumni contains the names of men who have become noted in all the pursuits of life, both in peace and war. The exigencies of the struggle between the States closed the college in 1863, and the buildings were used as hospitals for sick and wounded Confederates. But as soon as peace was restored the institution was reopened by the "Origovernment" and enjoyed several years of success until it was overturned during the Radical regime. Since 1880, however, the college has been continuously open, and has educated hundreds of young men and a number of young women, who for some years have been permitted to partake of its advantages. Originc'ly the College was known as a literary institution, although from early times its faculty contained scientists of great ability, but of late years its courses have broadened out so as to embrace also technical scientific instruction, instruction in law and a course in practical methods for teachers.

course in practical methods for teachers.

President Benjamin Sloan, the head of the Department of Physics and Engineering, is a graduate of West Point, and was a distinguished officer of ordnance during the war between the States. His graduates in engineering are now occupying most responsible positions in different parts of the United States. Professor Joseph Daniel Pope, dean of the Law Department, has had wide experience in government in the dean of the Law Department, has had wide experience in government in the legislative halls of the State and in the Secession Convention, and is recognized as high authority in law and in equity jurisprudence. Some of the other members of the faculty have had distinguished cureers in this College, while others have brought to it the best methods of colleges and universities cisewhere.

The most recent and most important addition that has been made to the usefulness of the College is the establishment of scholarships to be given to lishment of scholarships to be given to one man-teacher in each county who has taught at least one year. This is intended to offer the advantages of professional training to one who has already gathered practical experience in direct contact with pupils in the school room and realizes the difficulties that must be surmounted. Professor Wardiaw, who is at the head of the department in pedagogy, is eminent in his profession both as a student and as a practical teacher and school superintendent.

practical teacher and school superintendent.

The College is situated at the capital of the State and affords to the student opportunity for studying the workings of the government in a direct way. It is accessible from all parts of the State and is in a healthful locality. The religious advantages are exceptional because each of the principal denominations has a prosperous congregation in Columbia. Expenses are moderate. There is a suite of three rooms for each pair of students, warm in winter and well ventilated in summer. A large campus, a fine gymnasium and an excellent athletic field afford ample opportunity for exercise.

The College is increasing in usefulness and in prosperity with the increased prosperity, of the State, and the prospects are that with the new century this institution will surpass the admirable record it has already made.

Queen Victoria's Bible Class.

Queen Victoria's home when she Buckingham Palace. Here here was quite an army of servants, many of whom were married and had children. and so the Queen made up her mind to form a Bible class for the special benefit of these children. The Queen taught the class herself and many of the children who have since grown up to be mon and women, we are told, look back with intense pleasure and pride to the time when they had the Queen of England for Chair Sundayschool teacher.

In teaching her class the Queen would choose a chapter in the Bible which the scholars would read in turn, verse by verse. She would then explain the more difficult passages in the simplest language and point out what lessons were to be learned from the chapter. The service would then be closed by the singing of some favorite children's hymns and prayer. -Church Eclectic

- Everybody longs to be a farmer except the one who is.



THE BRADFIELD REGULATOR CO., ATLANTA, GA.

GRAY'S LIVER PILLS

Constinution.

Indigestion, Malarial Poison. Dizzmess,

Torpid Liver. Biliousness. Pains in the Back. Headache.

And all Liver Complaints.

For that sallow complexion there is no better Pill made.

These Pills act directly on the liver, but do not gripe or sicken.

Price 25c. Box. Guaranteed to help you.

Orr-Gray & Co.

DR. MOIFFETT'S

Special attention is invited to a new shipment of-

ACORN STOVES AND RANGES!

Which we have just received, and which includes the very latest patterns; both coal or wood, adapted to the requirements of this market.

If you require anything in the Stove or Range line we solicit an opperatunity to explain the merits of THE ACORN.

We also carry a complete and up-to date line of TINWARE, WOOD-ENWARE and HOUSE FURNISHINGS.

Guttering, Plumbing and Electric Wiring executed on short notice. Yours truly,

ARCHER & NORRI?.

FARMING TOOLS

NOTHING is more gratifying to an up-to-date Farmer than to have a well-equipped outfit to begin his Spring work, and this he is sure to get whenhe does his trading with us. We can sell you-

> PLOW STOCKS. SINGLE TREES. HEEL BOLTS. CLEVICES. TRACES. COLLARS. COLLAR PADS. BACK BANDS, PLOW LINES.

And everything necessary to begin plowing, except the Mule, and we can "aight" you to a Mule trade.

We still have a few Syracuse Turn Plows that we are closing out fat a very low price, and can furnish you with the Terracing Wing.

Come in and let us show you our 7-foot Perfection Trace Chain at [50c. pair. Nothing in the Trace line compares with this Chain. Don't you need a hog pasture? We have the Wire Fence for you.

BROCK HARDWARE COMPANY.

Wheat Growers! TAKE NOTICE.

Do not Fail to try our Spec ally Prepared 8 1-2 2--2 Petrified---

Bone Fertilizers for Grain.

We have all grades of Ammoniated Fertilizers and Acid Phosphates, also Kainit, Nitrate of Soda and Muriate of Potash; all put up in new bags; thoroughly pulverized, and no better can be found in the market.

We shall be pleased to have your order.

ANDERSON PHOSPHATE AND OIL CO.