## EXPERT TALKS ON

Mr. H. J. Webber, of Agricultural Department, Says in the South

jural Department at Washington, being introduced to the convention said: America grows five-sixths of the

rotton of the world and exports annugly from 6 to 8,000,000 bales. Nevertheless we annually import about \$10,-000,000 worth of Egyptian cotton for manufacturing purposes. It would matic conditions which exist in different parts of the cotton belt, that we should be able to successfully grow Numerous trials have been made to grow this cotton here, and the Departolem. The first importations sestematic effort however, was made to imported, this being the first year in follow up the results of these impornations. Mr. W. H. Wentworth, of Floresville, Texas, several years ago than the Ashmouni, here in this inconceived the idea that this cotton stance, only 960 pounds of seed cotton could be successfully grown in America and made quite extensive experiments with imported seed of Mit Afifi Agriculture. He cultivated the cotton ness before it will be satisfactory for for a number of years, and was convinced that it was perfectly possible to produce a good grade of Egyptian cot- conducted. ion in that portion of Texas where his experiments were conducted. His attempts to market the cotton, however, taet with ill success. Several bales were

With the organization of the Section of Seed and Plant Introduction, of importations of seed were made, and records have been kept in every case Conn., of Jannovitch Egyptian grown by Mr. Robert Viewig, at Godwinsville, Georgia. The cotton was pronounced to be particularly free from short stock and waste and of good

ent to the Boston market, and if we

tre correctly informed, remained un-

The writer's experiments in the culivation of Egyptian cotton and its imof the varieties Mit Afifi, Ashmouni, nnovitch Abbasi, and Gordon Pasha. The observations on these small plates and on other plats in various parts of onditions before thorough success in their culture could be expected. Extion of the Ashmouni, as well as an and the average yield has not been attempt to improve and adapt it to conditions by means of hybridization. When this variety was first imported nvariably reached an unusual height and were spreading and open, and proinced few bolls, so that the yield was too light to be profitable. While in alnormal crinkly character of true Egyptian, there would seem to be a tendency to lose the brown coloration, although this character is not particularly marked in the native Egyptian otton. The selections of Ashmouni and the cotton again selected at Co lumbia, S. C., in the seasons of 1900 and 1901, and in 1902 the best select plants were transferred to Hartsville, S. C., where a small field was planted the soil being of sandy loam, such as is ommon in various parts of the South. is a result of this selection the plants have been reduced in size, so that the past season they averaged only about 1/2 to 4 feet in height and were much

Thousands Have Kidney Trouble and Do Not Know It-If Any of Your Family Have Had Kidney or Bladder Trouble Test Your Urine and See if You Have It.

Let your morning urine stand 24 hours. you find a reddish, brick-dust sediment n it, or if particles are floating in it, or if it is cloudy, your kidneys are in a diseased Condition and unable to perform their work. The result will be the bladder and urinary organs will become inflamed, uric acid will son the blood, the stomach will become affected and unable to digest the food, you will have pains in the small of the back, orpid liver, pains in the back of the head and neck, rheumatic pains and swellings all over the body, eczenia and jaundice; the ystem will become weak, and a breakdown the general health will take place, with disease or diabetes, which will prove fatal if not treated promptly and with

Thousands of unsolicited letters are reved daily from grateful men and women who have been cured by Warner's Safe Cure. ors prescribe and hospitals use "Safe exclusively in all cases of kidney or

Safe Cure" is purely vegetable and conrepairs the tissues, soothes inflammation and irritation, stimulates the enfeebled ROTTLE, Write to Warner's Safe Cure fore the weevils become so aboundant Co., Rochester, N. Y., for free medical book. as to destroy all the forms and young WARNER'S SAFE PILLS move the bolls as developed. The upland cotton gently and aid a speedy cure.

Refuse Substitutes: they are danterous. Ask for Warner's; it will cure you.

had also been increased in length and abundance on the seed. The seed used in starting this experiment was im-EGYPTIAN COTTON ported from the province of Fayoum, in Egypt, where this variety is almost exclusively grown. The selection of this variety for improvement may possibly have been a mistake, as the variety Mit Afifi is recognized in Egypt as the best variety grown because it yields the heaviest and produces the best fiber. It is not as early as Ashmouni, however,

and the imported Ashmount in the vi-Can be Grown Successfully cinity of Columbia, where the experiments were conducted, gave a much better yield and appeared much more promising than the Mit Afifi. In the selections the earliness of the plants has been kept constantly in mind, so Mr. H. J. Webber, of the Agriculthat this factor has been somewhat improved, the plants maturing their bolls rather earlier than when first imported. With the increase in length of staple, which has been about onefourth of an inch on the average, we should have expected the yield to decrease. On the contrary, as a result of the selection, this has at the same time been considerably increased, and seem from the various soil and clison gave a yield of 1,303 pounds of seed cotton per acre, and 479 pounds of lint per acre. The fiber produced was that this cotton somewhere in this country. of typical Ashmouni in every respect. and, as stated above, was longer and of better quality than the imported samples. (Samples of the imported fiber and of the American fiber were exhibited.) A field of Mit Afifi Egyptian cotton was also grown at Hartsville on soil of the same character, about a quarter of a mile from Ashmouni. This cotton was grown from seed directly

America. While the variety in Egypt.

almost invariably gives a larger yield

was obtained under exactly the same

conditions. The variety is very much

later than the Ashmouni and will have

to be increased considerably in earli-

cultivation in the latitude of South

Carolina, where the experiments were

Another illustration of the importance of carefully breeding the Egyptian varieties to meet our conditions is shown by the results of two years of selection with a special variety of Egyptian cotton which has recently been bred by Christian Stamm, in Egypt. When this variety was first grown by us in South Carolina, like all other Egyptian varieties, it grew very tall and open, and produced a very light crop. The few seed of the variety of the localities to which the seed imported had the lint attached as when were sent. Little information, however, taken from the boll, and the average has been obtained cencerning the re- length was only about one and threetall, some of the plants reaching a height of 8 feet and were very unproductive. Seed was selected from several of the best plants, which at the best were poor, and preserved for planting another season. The progeny grown the second year from these first year's selections were uniformly earlier, much more productive, and had a longer and better fiber. These were planted the second year and further careful selections of seed made from the best individuals of the progeny. The lint on some of the second year plants was remarkably abundant and uniform, and in a number of instances was as long as one and threefourths inches. As a result of two years of cultivation in this country and acters of the staple have been entirely

> Besides the tests of Egyptian cotton made in South Carolina in 1901, fields were grown in Florida, Georgia and Mississippi. In all of these cases the yield was comparatively light, indicating the necessity of improvement, yet the result as a whole were fairly en-

has not been carried on long enough to

result in the growing of large patches

tested. It would, however, seem to

promise a much better yield than the

immediately imported product.

In connection with the patch of Mi Afifi cotton grown at San Antonio Texas, a special feature was brought out which may prove of exceptional interest. Egyptian cotton as a whole is noted for its freedom from diseases of various kinds ,and in the course of these experiments the effect of the was watched with considerable care. A patch of two acres of Jannovitch Egyptian, grown at Pierce, Texas, the season of 1901, as stated above was very badly injured by the boll weevil. A small field of Ashmouni cotton in 1902 was also damaged by the insect, showing that this variety also is as susceptible to its attack as any other sort. The field of Mit Afifi of three acres, grow at San Antonio, Texas, on the evidence of resistance to the boll weevil, though further trials are neces sary before the matter can be satisfactorily settled. This cotton was grown on a field where the cotton crop had been entirely destroyed the preceding year. Near this plat, about 200 feet distant, was situated a small patch of upland cotton, a little over half an acre in extent, a patch of sugar cane intervening. The weevil did not appear on the Mit Afifi until the middle of October and did not become abundant uutil late in November. The upland cotton nearby was attacked early in the season and the crop was almost entirely destroyed, only a comparatively small proporition of the early bolls maturing. Throughout the season the nsects were abundant on the upland patch, so abundant on the Egyptian. The Egyptian variety gave a yield of 3,200 pounds of seed cotton, or about 1,066 pounds per acre; while the upland variety gave a yield of only 68 pounds of seed cotton, or at about the tains no harmful drugs. It is free from sediment and pleasant to take. It is a most found by investigators and others that tonic; a stimulant to | in general early varieties of cotton are on, and awakens the torpid liver. It less affected by the boll weevil than late varieties. When the insects first organs and heals at the same time. It builds up the body, gives it strength and restores denergy. You can buy "Safe Cure" at any denerge or direct. 50 CENTS AND \$1 A BOTTLE. Write to Warner's Safe Cure have the season advances. Very early varieties may set a large share of their crop be-

planted near the Egyptian was much

earlier than the latter and would nor-

more compact and prolific. The lint dom of the Mit Afifi plat from the weevil would seem to indicate that the plants of this variety may be in some degree distasteful to the insect, al though this cannot be definitely deter-

mined without further experiments. Varieties of the Egyptian cotton have also been found to be resistant to root-rot of cotton, a disease that is very serious in the Sea Island district causing considerable damage also in causing considerably damage also in

upland fields in those States. As indicated above, it is very important that all the varieties of Egyptian cotton be experimented with and improved by selection, but another line of research, which promises to give results of the greatest importance, is the hybridization of Egyptian varieties with Sea Island and upland races. One hybrid of this kind which has already been produced, has given results which indicate that it is of decided value. In 1899 hybrids were made of a good strain of Sea Island cotton with Ashmouni Egyptian and selections of the best of these have been grown and selected each year since. Last year about an acre and a half of the select progeny of this hybrid was planted at Columbia, S. C., and the resulting field in some respects was surprising. Within three years the hybrid had been reduced to such fixity that expert growers examining the field pronounced it to be practically a pure type. The se lection had been made continuously for plants of pure Egpytian type of fiber with the longest lint. The fiber averaged in general about one and fiveeighths inches in length, while a large portion of the plants ran as high as one and three-fourths inches. The fiber was uniformly of a light brown color like typical Egyptian, and was especially strong. Another feature of importance in connection with the hybrid is its faculty of retaining the lint in the bolls. One objectionable feature which we are but novices as compared cipation our opportunity, our land, our of all Egyptian cotton varieties that have come under the writer's observation, is the tendency of the cotton to fall out of the bolls shortly after they open. This requires that Egyptian varities be picked rather frequently. In the case of this Sea Island-Ashmount hybrid the field was left unpicked for about a month and a half and had become almost white with open bolls, yet hardly a lock fallen, although the weather conditions had been very severe. Should this hybrid hold up hereafter as in the past it will certainly be considered superior to any of the Egyptian varieties that have been tried by us thus far. We are planting a large field of this hybrid the present season and expect to distribute seed to grow-

fixed type. but desire to produce new ones. It seems to us that upland varieties producing a longer and better quality of staple would be very valuable and desirable and one of the primary objects of our cotton breeding work is to produce upland sorts having long staple. We hope to accomplish this by securing numerous hybrids of the best sorts of upland and Sea Island and then selecting from them the best individual plants. If the staple is to be increased in length to any great extent, it must be borne on a smooth black seed, like can be ginned on a roller gin. Mr. W. A. Clark of Columbia, S. C., who is coriculture in work of this kind, early realized the difficulties in the problem and took up the finrst necessary step -the production of a smooth-seeded strain of the upland cotton. This he secured after five or six generations of selections, in a race which he called the Klondike. This sort we have used many times in hybridization with the

Sea Island, etc.

One feature of the greatest promise in connection with these hybrids is the profit obtained by us for our cloths their exceptional yield. If this quality or yarns can be retained, they certainly bid fair to greatly increase the production as wel las improve the quality of the lint. It is of course well known to the members of this organization that there already exist several long staple upland varieties of fairly good quality, such as Allen Improved, Griffin, Sunflower, etc. Unfortunately all of these types which have thus far been produced have very weak fiber and turfted seeds, requiring the use of a saw gin. We have every reason to believe that we may overcome these difficulties. It for this type of cotton does not seem so important as at first supposed; at least the experience in marketing cotton of this grade does not so indicate. Allen Improved and Griffin, which are grown quite extensively in parts of Louisiana and Mississippi, are uniformly ginned on saw gins and yet the fiber sold the past season on the New Orleans market at from fourteen to seventeen cents per pound, which is slightly in advance of the price paid for imported Egyptian. The Egyptian fiber is nearly or quite as long and much stronger, and should, it seems to us, sell at a higher price. There would seem to be no doubt that the Egyptian cotton can be ginned as satisfactorily on a saw gin with as little injury as these weaker-fibered uplands. We are led to believe, from observations of this kind, that saw gins if properly run and manipulated, can be used for ginning these cottons without very serious damage. If the saws are dulled by using before ginning the long staple and if the gin is run slowly and evenly, the injury will be reduced to a minimum and apparently be very slight. If saw gins can be satisfactorily used in ginning the long staple upland and Egyptian varieties, it would remove one of the most serious obstacles to the extension of long staple industry in upland cotton regions, as the roller gins are found only in Sea Island districts at present, and small quantities of cotton produced in other regions cannot find any easily accessible gin.

In conclusion, it may be said that while the experiments thus far have not been altogether satisfactory, yet in general the indications are that we may expect to be able to grow a perfectly satisfactory product of Egyptian cotton, and can also expect that the Beware of so-called kidney remedies odor; they are harmful.

Beware of so-called kidney remedies larger crop in boll weevil districts owing to this fact. The striking free-

Continues to make Miraculous Cures

READ THIS LETTER: ALMOST A MIRACLE.

Gentlement—In September, 1899, I took rheumatism in a very bad form. In a month after the disease started I had to give up my work and go to bed. It continued to grow worse until my arms and hands were badly drawn, so much so that I could not use them. My legs were drawn back until my feet touched my hips. I was as helpless as a baby for nearly twelve months. The muscles of my arms and legs were hard and shriveled up. I suffered death many times over. Was treated by six different physicians in McColl, Dillon and Marion, but none of them could do me any good, until Dr. J. P. Ewing, of Dillon, came to see me. He told me to try your "RHEUMACIDE." He got me one bottle of the medicine and I began to take it and before the first bottle was used up I began to get better. I used five and a half bottles and was completely cured. That was two years ago, and my health has been excellent ever since. Have had no symptoms of rheumatism. I regard "RHEUMACIDE" as by far the best remedy for rheumatism on the market. I cannot say too much for it. I have recommended it to others since and it has cured them. DILLON, S. C., Aug. 18th, 1902. recommended it to others since and it has cured them.

Will say further, that I began to walk in about six days after I began to take "RHEUMACIDE," with the aid of crutches; in about three months after I began to take it, I could walk as good as anybody, and went back to work again. JAMES WILKES. Very truly,

All Druggists, or sent express prepaid on receipt of \$1.00. Bobbitt Chemical Co., 

ADVANTAGE OF DIVERSI-

( Continued From Seventh Page.)

ceive for this waste?

we make out of the cotton from which | ments made in this article. this waste is obtained.

against 9,000 a few years since. large number of plants erected in the the late Henry W. Grady, isting. We are not satisfied to simply terprise—the Olympia Mills—which improve the strains that already exist, has 104,000 spindles in one mill and all in one room.

The competition of the Southern mills has brought about certain consolidations and mergers, some of which being developed. Such consolidations are bound to work out a great deal of

the title of this paper, it must be evident to you all that the present output or the South is too congested and for vent an over-abundance of competition, not only among yourselves, but as against our Northern friends.

There are many fabrics now being made and vast quantities consumed in the North of which we have but little part in the manufacture. We make immense quantities of yarns which are sent outside our bounds to be worked up into commercial articles, in the manufacture of which large amounts of money are paid out for labor and profits, making for the convertor a greater profit per pound, by far, than

We make print cloths to be sent North to be finished, and there would the Presbyterian College,

seem to be a fruitful ground with us to establish print works, dye houses FYING MANUFACTURES and bleecheries. In fact, the field is so broad I cannot, in the brief space allowed me, fully cover it.

Baltimore, Md.

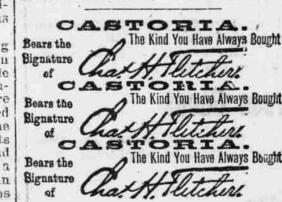
I am fully conscious of my inability to present this subject to you in the for this section over what we now re- vivid light and thoroughness it might have been, and I fully trust this effort Therefore, we ought, in justice to may but induce you in some degree to ourselves, study into the waste prob-fully investigate, and then use your lem more than ever, in the use of best endeavors to materialize the antiwith the people who purchase these people and our raw material give us.

wastes, who pay transportation for At the close of this paper you will thousands of miles, and by their ex- find when you receive the copy of the perience rework them into fabrics and printed transactions, an appendix, in materials, resulting in a profit, there- which is inserted several tables conby obtaining often-times more than we taining information referring princiobtain out of the manufactured goods pally to facts that sustain the state-

And now, with this great harvest The tendency to concentrate and field within our possession, is it build mills with a larger number of strange that the native born of this spindles than formerly is a move in section can but look with pride upon the right direction. Taking all the the land of his birth and anticipate mills of the South, and the average that the time is rapidly approaching number of spindles is about 12,000, as when its acres will be dotted over with buildings containing revolving Competition will show that these spindles and the beating of many units are too small to profitably con- looms and of sufficient numbers of the tinue, each with its board of officials same to practically supply the world's ers shortly should it prove to be of and salaried managers. It is safe to requirements, when all the nations of say that the day of the 3,000 to 5,000 the earth may be our customers, and spindle mill is passing away. The re-jour products used and worn by all peoford of the past three years shows a ple of the world. May the efforts o South of from 25,000 spindles up to strongly and persistently foretold that grand specimen of push and en- years ago of the coming of a "Greater South," not fail to be fully realized.

Too Great a Risk.

In almost every neighborhood some one has died from an attack of colic or cholera morbus, often before medisummoned. A reliable remedy for these diseases should be kept at hand The risk is too great for anyone to take. Chamberlain's Colic, Cholera and Diarrhoea Remedy has undoubtedly saved the lives of more people and re lieved more pain and suffering than any other medicine in use. It can al ways be depended upon. For sale by R H. Jordan & Co.



Miss Leila Caldwell has returned to

BECOMING A MOTHER

Is an ordeal which all women approach with indescribable fear, for nothing compares with the pain and horror of child-birth. The thought

of the suffering and danger in store for her, robs the expectant mother of all pleasant anticipations of the coming event, and casts over her a shadow of gloom which cannot be shaken off. Thousands of women have found that the use of Mother's Friend during pregnancy robs confinement of all pain and danger, and insures safety to life of mother and child. This scientific liniment is a god-send to all women at the time of their most critical trial. Not only does Mother's Friend carry women safely through the perils of child-birth, but its use gently prepares the system for the coming event, prevents "morning sickness," and other dis-

comforts of this period.
Sold by all druggists at \$1.00 per bottle. Book containing valuable information free. comforts of this period. The Bradfield Regulator Co., Atlanta, Ga.

> HARTFORD Boiler Inspection and Insurance Company

J. M. ALLEN, Pres.; WM. B. FRANKLIN, Vice-Pres.; F. B. ALLEN, Second Vice-Pres.; J. B. PIERCE, Sec'y.; L. B. BRAINERD, Treas.; L. F. MIDDLEBROOK, Asst. Sec'y.

HARTFORD, CONNECTICUT.

THOROUGH INSPECTIONS And Insurance Against Loss or Damage to property and Loss of Life and Injury to Persons Caused by STEAM BOILER EXPLOSIONS. CHARLOTTE OFFICE, TRUST BUILDING. Resident Agent, C. K. DUNCAN, Inspector and Special Agent.

Money in Raising Chickens

get an entire roll of

There is a growing demand for fine chickens at good prices; you can secure quite a nice revenue from chickens and eggs if you will properly arrange that back lot for their care. You can

GOOD POULTRY WIRE from us for a few dollars and it will stand for years. You will save the cost of the wire in one season in the little time and ease with which you are able to handle your poultry. This wire is also excellent for making trellises, training Poultry Dealers-We advertise your business-come here to buy

Allen Hardware Company

R. O. ALEXANDER

BENDER COTTON

And Long Staples FOR HIGH GRADE SPINNERS, 40s to 60s

19 1-2 E. 4th St., Charlotte, N. C.

W. H. BIGELOW

Tempered and Side Ground Card Clothing TOPS RECLOTHED LICKERINS REWOUND

12 W. 4th Street, - Charlotte, N. C.

Regular Sizes of Clothing Always in Stock Charlotte Phone 336 : Bell Phone 59

O. A. ROBBINS

COMPLETE EQUIPMENTS FOR COTTON MILLS : : :

LAPPERS, CARDS, DRAWING, ROVING, SPINNING, SPOOLING, WEAVING and FINISHING MACHINERY.

CHARLOTTE, N. C

Carolina Sizing Co., CHARLOTTE, N. C.

Sizing Compounds for White and Colored Goods

SPECIAL-WE MAKE A PREPARATION FOR DRAPER WARP STOP MOTION.

20 Looms to the Weaver BY USING OUR COMPOUND FINISHING PASTE For Cotton Goods Gives a Silk Finish

A. H. Wasburn.

COTTON MILI. MACHINERY and EQUIPMENT

Everything needed for the Complete Equipment of Cotton Mills, to manufacture Yarn or Woven Fabrics 

Correspondence Solicited

CHARLOTTE, N. C

Largest Stock in the South

We will appreciate an opportunity to quote you on

PIPE From 1-8 to 12 In.

(Plain, Galvanized, Extra Heavy and Brass.)

Pipe Cut to Length a Specialty Fittings Valves, General Steam and Water Supplies

GENERAL FIRE EXTINGUISHER COMPANY Charlotte, N. C. Charlotte Plant

We do all kinds of Pipe Work