The Watchman and Southron.

Published Wednesday and Saturday
—BY—
OSTEEN PUBLISHING COMPANY
SUMTER, S. C.
Terms:
$1.50 per annum—in advance.

Advertisements.

One Square first insertion $1.00
Every subsequent insertion.. .. .50

Contracts for three months, or longer will be made at reduced rates.

All communications which subserve private interests will be charged for as advertisements.

Obituaries and tributes of respect will be charged for.

The Sumter Watchman was founded in 1850 and the True Southron in 1866. The Watchman and Southron now has the combined circulation and influence of both of the old papers, and is manifestly the best advertising medium in Sumter.

FARMERS' FLOUR SUPPLY.

Food Administration Issues Order Permitting Grinding of Year's Supply.

Columbia, July 10.—The food administration regulations governing the grinding of wheat have been modified to the extent that farmers are now permitted to grind a full year's supply. A bulletin just issued by the food administration authorizes millers in South Carolina to grind, from wheat raised by farmers, enough flour to supply their families and their tenants for 12 months. In arriving at the amount of flour required for such supply, calculation must be made upon the basis of 12 pounds per person per month.

Farmers are expected, however, to use flour substitutes, pound for pound, with the flour they have ground from their wheat. The fact that they have produced their own wheat does not release them from this obligation. They are also expected to see to it that their tenants, furnished by them, use flour substitutes on the 50-50 basis.

When farmers sell flour to individuals they will be required, under the rules of the food administration, to sell an equal amount of flour substitutes or take miller's certificates from the purchaser showing that they (the buyers) have had flour substitutes ground to cover the flour they buy, pound for pound. This applies in cases where farmers who raise wheat sell flour to neighbors who perhaps have no wheat to be ground.

Farmers can sell flour, from their wheat, to merchants, but when the merchants resell this flour it must be sold, pound for pound, with flour substitutes to the persons who buy it.

These regulations apply to threshermen as well as to farmers.

PEEPLES FOR SENATE.

Attorney General Leaves Governor's Race.

Columbia, July 10.—Thomas H. Peeples, attorney general, last night withdrew from the race for governor and entered the race for the short term for the United States senate.

The short term is that portion of the unexpired term of the late Senator Tillman which extends beyond the tenure of Senator Christie Benet, the appointee of Governor Manning. Eight months of the term are to be served and the appointment by the governor can not extend beyond six months.

Mr. Peeples has been making the race for governor, the State office party having canvassed 15 counties. Mr. Peeples will join the senatorial party in Dillon next Tuesday. He has been attorney general six years and when elected the first time was the youngest man ever to hold the office in South Carolina.

FATHER ARRESTS SON.

Turns Young Man Over to Authorities as Deserter.

Birmingham, July 9.—Starling Hicks of near Jasper brought his son Starling Hicks, Jr., to Birmingham Monday night and almost overcome with emotion, turned the young man over to federal officials as a deserter from the United States army.

"It nearly breaks my heart to have to arrest my own son and turn him over to the authorities on so serious a charge," said Mr. Hicks, "but even if he is my son I can not harbor him as a deserter, or even countenance his act."

Young Hicks is said to have deserted from Camp Wheeler, Macon, Ga. about two months ago and has since it is reported, been hiding in the woods near Jasper. Mr. Hicks spent several nights in the woods in an effort to locate his son.

CONSCRIPTION FOR RUSSIA.

Trotzky Says Russia is on Eve of General Military Conscription.

Paris, July 10.—Speaking at the opening today of the great congress of the Russian soviets Bolshevik minister of war Trotzky, according to a dispatch from Basel, Switzerland, this morning said: "Russia is on the eve of general military service conscription."

BOLL WEEVIL CONTROL.

DEPARTMENT OF AGRICULTURE WORKING ON PROBLEM.

Ideal is to Poison the Water That the Destructive Insect Drinks.

Washington, July 7.—Control of the cotton boll weevil seems to be in a fair way of accomplishment by the work of an entomologist of the department of agriculture.

When that insidious pest, which has been taking heavy toll of the cotton crop and annually extending his feeding grounds, stops his work of puncturing cotton squares and bolls, and ambles forth to quench his thirst from a dewdrop or raindrop on the cotton plant, he is likely in the future to encounter a poisoned draught which will be as effective as a knock-out drop. What this means to the cotton growers of the South and the industry as a whole can hardly be estimated in dollars and cents, but the curtailment of the weevil's activities, even in small part, is so important as to make the discovery of the United States department of agriculture of the fact that arsenicals may be used as a powder spray in controlling this pest one of its most striking and valuable contributions to the agricultural industry.

Mr. B. R. Coad, of the bureau of entomology, while working on some biological investigations of the boll weevil, found that although the weevils are not hard drinkers they drink regularly from the rain or dew collected in droplets on the leaves of the cotton plants. Having been on the trail of the cotton boll weevil for some time, his logical inquiry was, "Why not poison the water which the weevils drink?" Since 1913, Mr. Coad, with a corps of entomologists with headquarters at Tellulah, La., has been experimenting with various poisons applied in different ways, all with the purpose of administering a dose which would be fatal to these insects which have invaded such a large part of the cotton-producing territory of the South. These entomologists have not finshed their work, but they have proved by a series of experiments that boll weevils can be poisoned under field conditions and that the poisoning is a practical method of controlling the pests. The usual check-plats have been used in these experiments, and the results have shown that yields of from 250 to 1,000 pounds more of seed cotton per acre can be raised on sprayed areas than on the unsprayed plats. The experiments have been conducted under many conditions and for several years, so as to give the method a complete trial before making the results known to the growers. The details are now being published in a department bulletin entitled "Recent Experimental Work of Poisoning Cotton Boll Weevils."

When the experiments were started again last year it was recognized that the former work had merely demonstrated the possibility of poisoning weevils successfully and that many phases of the economical use of the poison still remained to be worked out. A very elaborate series for that season was planned and about seventy-five tests were started in the neighborhood of Tallulah, each one intended to determine some particular point of importance. The earlier studies had shown that under certain conditions poisoning was profitable, but it was known that any change in these conditions might easily result in a much lower gain, if not an actual loss, and it was essential to determine thoroughly the possibilities and limitations of boll weevil poisoning before the informaton would be of value to the public. A peculiar combination of seasonal conditions, however, resulted in an almost complete absence of weevil damage in all of the cotton in which tests had been planned. The experiments therefore, could not be conducted under the desired conditions of heavy weevil infestation. Nevertheless, the results confirmed those of the preceding two years, but still left many gaps in the information essential to outlining a general procedure for weevil poisoning. On one of the heavily infested areas a gain was made of 50 per cent in the sprayed cotton over that grown on the unsprayed area.

A number of experiments were conducted also in the north delta in Chicot county, near Lake Village, Ark. and in Washington county, near Scott Miss. At both of these points a heavy infestation, due to different seasonal conditions, was encountered, and pronounced results were obtained from the poison. In every case the experiments were conducted on comparatively small areas, subject to a continual influx of weevils from surrounding untreated cotton, but in spite of this a very definite weevil control resulted from poisoning. The open cotton in every case showed a definite gain to the last row of treatment. The gains per acre ranged from 250 pounds to 1,007 pounds of seed cotton. It is difficult, of course, to estimate how much larger these gains would have been if the entire cuts or entire plantations had been treated, and thus the migration of weevils from the unpoisoned cotton prevented. It is clear, however, that the gains secured on the small areas were exceedingly conservative.

A large scale treatment was made in August last year on a section of an Arkansas plantation. The cotton grew on land of fair quality and was not planted until late May. Weather conditions had retarded the plants greatly and they did not start setting the crop until the latter part of July. About the middle of August a fair crop of bolls had developed, but the plants were large and leafy, and the weevils had multiplied so rapidly that a very heavy infestation of weevils was present. Blooming had practically ceased and the weevils had cleaned up the squares so thoroughly that they were attacking the bolls in great numbers, and the bolls, even to the largest present, were being riddled by punctures. It seemed probable that on one section no bolls would be left to open. It was, of course, too late to attempt to set a new crop by poisoning, but an effort was made to save the bolls then present on the plants. Treatments were given from August 23 to about September 1 on several hundred acres. Upon counting the squares it was found that about 86 per cent of the squares in the cotton to be poisoned had been weevil-punctured. This cotton was given a single poisoning, and about ten days later it was found that the weevil infestation in these same cuts or areas had been reduced so that only 36 per cent of the squares were punctured. During the same period the infestation in the adjoining unpoisoned cotton had been increasing steadily. Practically all of the poisoned cuts started blooming again at this time and a number of them reached what is ordinarily termed the "flower garden" stage of blooming, five to seven blooms per plant on a single day being not at all rare.

In starting the treatment of this large area it had been anticipated that several applications would be necessary to produce the desired result, but the effect of a single application was so pronounced that it seemed unnecessary to repeat it. The weevils had been so reduced that only 36 per cent of the squares were punctured, and although thousands of weevils were being bred out from the squares on the ground or were coming in from other plantations every day, it was still obvious that the weevils would greatly reduce their attacks on the bolls until they had caught up with the squares then present, and that this period would be long enough to allow the bolls to become sufficiently hardened to avoid weevil damage. Owing to the necessity for poisoning considerable areas in this case and to the inability to leave unpoisoned plats as checks, it was, of course, impossible to determine the exact benefit derived from the treatment. Rough comparisons, however based on yields of surrounding cuts made it obvious that a considerable gain had been secured and that poisoning had been a very profitable operation.

In the early experiments the triplumbic form of lead arsenate was used, but was not sufficiently effective and the di-hydrogen form of lead arsenate proved to be a better poison for the work. Later additional tests demonstrated that a high grade of calcium arsenate was still more effective and has the great advantage of being cheaper than lead arsenate. A number of tests were made with various mixtures and dilutions of arsenicals. This work, however, is still in the experimental stage and, according to Mr. Coad, it is difficult to prophesy just what the results will be. It is obvious, however, according to the scientist, that either a di-hydrogen lead arsenate powder containing not less than 32 per cent of arsenic pentoxid or a calcium arsenate containing at least 42 per cent of arsenic pentoxid will produce an effective control if handled properly. It also is expected that it will be possible to dilute these considerably with some cheap carrier such as lime, though this has not been definitely determined. The experiments have shown that a very fine powder is taken up more readily by the dew and held in suspension for the weevils than coarsely powdered chemicals. The physical condition is especially important since the poison is applied in the form of a dust spray.

The time of applying the poison of course, varies under different conditions. It has proved most effective when applied just as the cotton obviously slackens in blooming, but further work along this line is still to be done. It seems probable that the effective interval between applications is about one week. It is well known that much more effective poisoning with dry dust can be done while the dew is on the plant, as the poison not only clings to the plant better, but has much less tendency to drift from the cotton. The most effective time for application, therefore, usually is between 4 p. m. and 9 a. m. Several machines are on the market for dust spraying. In the early experiments a hand dust gun was used, with which it was possible to cover four to five acres a day. In order to cover larger areas, however, a special power machine was developed, which will cover nearly 200 acres per day. The department now expects to develop an intermediate type which can be sold cheaply and which will cover twenty to thirty acres per day.

The amount of poison required for application so far has depended more upon the requirements of the machinery used than on the amount necessary for thoroughly dusting the cotton. In general about five pounds per acre have been applied, but this is excessive, and with further improvement in the machinery and the use of the poison with mixtures, such as lime, smaller amounts will be effective. In most of the experiments from three to five applications were made, but the effectiveness of these was considerably reduced by the fact that they were on such small plats. In the large-scale experiment the effect of a single application was as great as was secured from about three applications on a smaller plat. This more efficient work on the large field was due, of course to the fact that there was practically no migration of weevils from adjoining areas.

The cost of treatment averaged about $1 per acre for each application. This, however, may be reduced considerably when large areas are sprayed and when improved machinery, requiring less poison, is employed. The cost may be still further reduced when it is possible to mix the poison with other powders, such as lime, which will act as carriers. Further, it will rarely be necessary to poison an entire plantation to control the weevil, since on emerging in the spring they always concentrate near the area in which they passed the winter. The weevils remain rather closely to these points until they have multiplied sufficiently to threaten a shortage in the local food supply. For this reason a great part of the cotton is not seriously infested with weevils until some time after midseason, and then not until well along in August.

The control measures adopted must depend upon conditions in each plantation, but by concentrating on the more heavily infested cuts just before the weevils become sufficiently abundant to migrate to the remainder of the cotton it will be possible not only directly to benefit the cotton treated, but to protect the remainder of the plantation by preventing the weevil migration. In this way the cost of the treatment for a comparatively few acres will be borne by the benefit derived by the entire plantation.

FIXED COTTON PRICE PROPOSED

South Carolinians Tell of Meeting in New Orleans.

The cotton States official marketing bureau, composed of the commissioner of agriculture, the chief of the marketing bureau and the president of the farmers' union of each cotton growing State, met in New Orleans, July 1 and 2. Proposals for government price fixing on cotton and acreage reduction were rejected. J. J. Brown, commissioner of agriculture of Georgia, presided at the meeting which was held in the Grundwall Hotel.

The meeting recommended that a propaganda be conducted in each State by the secretary of agriculture, assisted by county chairman and three workers in each school district, to promote a plan whereby cotton growers will hold one-third of this year's crop until the war is over and will sell the remaining two-thirds as slowly as possible. A committee was appointed to go to Washington to confer with officials of the regional banks, asking that ample funds be provided to carry out the proposed policy.

The South Carolina delegation to the meeting was composed of A. C. Summers, commissioner of agriculture; W. G. Smith, State warehouse commissioner; E. W. Dabbs, of Mayesville, L. D. Jennings and E. K. Friar of Sumter, Senator George K. Laney of Chesterfield and Dr. Wade Stackhouse of Dillon.

E. W. Dabbs and W. G. Smith remained after adjournment of the meeting to attend the conference of South Carolina bankers and farmers which was held in New Orleans, July 5, for a further consideration of ways and means whereby a fair price for cotton could be assured the farmers. Nine of the ten cotton growing States, North Carolina being the exception, were represented by a banker and farmer at this meeting. W. W. Woodson, a Texas banker, presided at the meeting.

Establishment by the government of a corporation to be known as the United States Cotton Corporation, with the power to buy for the account of the United States government such cotton as may be offered for sale without other available buyers at a price to be fixed by President Wilson, will be recommended to congress by a special committee consisting of one banker and one cotton producer from each of the States in the cotton belt, is the provision of a resolution accepted by the conference. Members of the committee were appointed immediately. Following is the text of the resolution:

"Be it resolved, That this meeting petition the president and the congress of the United States to create a corporation to be known as the United States Cotton Corporation with power to buy for account of the United States government such cotton as may be offered for sale without other available buyers at a price to be now fixed by the president of the United States.

"That concurrently therewith arrangement be made whereby there shall be insured to the consumer of cotton fabrics a price consistent with the price of the raw material, allowing to the manufacturer a safe and reasonable return upon his operations.

"That a committee from this section composed of one producer from each cotton growing State be sent to Washington to present this petition and take such other steps as may be necessary to secure the consummation of this plan."

Two officials of the federal reserve bank addressed the meeting and assured the bankers and farmers that the government was in sympathy with their movement and that the bank would lend its assistance in the proposed betterment of marketing conditions. Speeches and comment during the meeting developed that there will likely be a crop of 15,000,000 bales this year and a surplus of 4,000,000 bales. Transportation problems that are likely to be encountered in moving such a large crop were also discussed.

The Southern Cotton States' Association of Bankers and Farmers was organized to look after the cotton situation in the South in the future. A committee was appointed to draw up a constitution and by-laws. The committee that will go to Washington were instructed to meet at the Willard Hotel, July 17. South Carolina representatives on the committee were not appointed at the conference but will be designated within a few days.

TWELVE BILLIONS FOR ARMY.

Washington, July 10.—President Wilson today signed the twelve billion army appropriation bill.