The Chatham Record

THURSDAY, FEBRUARY 15, 1894.

H. A. LONDON, Editor.

DEMOCRATS, and especially Southern democrats, cannot afford to divide and disrupt their party. To do so would be worse than folly; it would be a crime and political suicide. And yet some prominent papers with their imprudent utterances are doing all they can, unwittingly it may be, to bring about such a calamity. For many years the democrats have been struggling to obtain control of the federal government. Not discouraged by repeated defeats, but in each succeeding campaign rallying again to their standard, the democrats have at last secured the political supremacy in this country and are in control of the executive and legislative departments of our government And now, when at last we have secured that supremacy, shall we be guilty of the folly, of the crime, of losing it by quarrelling among ourselves? Shall we thus prove to our opponents that we are not worthy of the success, of the power, that at last has crowned our long continued struggles?

Men and brethren let us bear and forbear. Let us not be too quick to criticise or censure that which may not be pleasing to each one of us. And above all, let us not, as some are doing, furnish weapons and arguments for our opponents to use against us in the next campaign.

Notwithstanding the sneers of our opponents and the criticisms of professed friends, the democratic party is now redeeming its pledges made to the people. The chief topic of discussion for years, the most important measure of legislation that has been demanded, and indeed the great difference or distinction between the republican and democratic parties has been and still is a reform of the tariff. That has loomed up far above everything else, and to that is the democratic party chiefly indebted for its present power and supremacy. And we unhesitatingly assert that on this great question the democratic party is fully redeeming its pledges, and that the Wilson bill when it becomes a law (as surely it will), will be recognized and appreciated as the most important and most beneficial legislation that has been enacted since the war.

The next most important matter that has effected our people—and especially us of the South—is federal interference in elections. The election laws passed by republican Congresses were threatening the liberties of our people and imperiling the great right of suffrage. And the fear of a still more oppressive law—the odious Force bill which came so near becoming a law two years ago—solidified the South as nothing else had done. And the democratic opposition to this was a mighty lever in placing that party in power. Not only have we escaped that odious measure—the infamous force bill—but a bill has passed both branches of our democratic Congress and been signed by our democratic President, repealing all federal election laws and wiping out every vestige of federal interference in our elections. This of itself should entitle the democratic party to the grateful support of every citizen, who values the purity of the ballot box.

Another pledge redeemed by the democratic party is the reduction not only in taxation, but in expenditures. The chairman of the appropriations committee in the House has publicly stated that the reduction in the appropriations this year would be about *thirty five million dollars*. Is not this vast sum worth saving? And is not the democratic party entitled to some credit for reducing the expenditures of the government so much during the very first year of its supremacy?

And in this connection we are pleased to recognize the aid received by the democrats from the populist members of Congress in repealing the federal election laws and in passing the Wilson tariff bill. When this tariff bill passed the House eight out of the nine populist Representatives voted for it, and when the Senate last week passed the bill repealing the federal election laws every populist Senator voted with the democrats for it. This proves that the populist members of Congress recognize the fact that the democratic and not the republican party is in favor of giving relief to the people, and from this our populist friends in North Carolina can learn a valuable lesson: and that is, they should vote with the democrats at the next election instead of with the republicans. There is certainly no chance what ever for the populists ever to elect a President or a majority in Congress. Either the democratic or republican party will control this country, and the question for every citizen to decide is, which of the two does he prefer? He may not like either of those two parties: he may not favor all the principles of either, but, as one or the other must rule this country, which of the two does he prefer? Can any former democrat, who is now a populist, hesitate in his preference? Must he not admit that there *is* a "difference between the two old parties", and that however much he may criticise or censure his old party, still is it not far better than the republican party?

The idea of the populists asking democrats to join in with them is like the tail attempting to wag the dog!

Washington Letter.

(From our Regular Correspondent.)

WASHINGTON, Feb. 9, 1894.

It is gratifying to note that the democrats in Congress have at last realized the benefit of united party action. No man in Congress has a right to expect that every measure he is called on to support will be entirely in accord with his personal ideas. If every member of Congress should adopt that idea legislation of any sort would be impossible. Long years of power in Congress taught the republicans the value of organization and unity, and the lesson will have to be learned by any party that hopes to accomplish important legislation. The democrats in the House made a good start by passing the Wilson tariff bill and followed it up this week by the adoption of the McCreary Hawaiian resolution which condemns the act of ex Minister Stevens and endorses President Cleveland's policy. The Democrats in the Senate are not entitled to graduate in unity, but they got together this week and passed the House bill for the repeal of the odious Federal election laws. If they would get together on everything and stay together it would be greatly to their credit and to the advantage of the democratic party.

Representative Bland's bill for the coinage of the seigniorage is now before the House, but as it has no order from the committee on Rules behind it and the anti-silver men are refusing to vote to make a quorum there is some doubt as to whether it will be able to maintain the right of way until disposed of. Countless misrepresentations have been made of the attitude of President Cleveland and Secretary Carlisle towards this measure. Neither of them have publicly spoken one word either for or against the bill, although Secretary Carlisle did point out one particularly objectionable feature in the bill to Mr Bland—that providing for the issue of silver certificates in advance of the coinage of the seigniorage—and Mr Bland expressed his willingness to change the bill so as to make the certificates issuable on the coinage of the silver.

In deciding not to grant hearings on the tariff bill the Senate committee on Finance deeply offended a few gentlemen who had come to Washington to instruct the committee and air their views, but the democrats on that committee in so voting were acting as they believe from the information they have received the entire country wished them to act. From north, south, east and west comes in chorus "whatever is to be done let it be done quickly", and the denial of further hearings on the tariff means the saving of several weeks time in the consideration of the bill in the Senate. Senator Voorhees sized up the situation correctly when he said: "Prompt and speedy action on pending tariff legislation is required at this time by every patriotic and business consideration". This being a fact acknowledged by business men who oppose as well as those who favor the Wilson tariff bill, the republican Senators will do well to consider the matter carefully before they attempt to carry out the obstructive programme which is now being prepared by their ablest parliamentarians in the Senate. The capitalists of the country are only waiting a definite settlement of the tariff question to invest their money and inaugurate a period of prosperity for everybody, not for a comparatively few fortunate individuals, and woe be unto the republican party if its representatives in the Senate postpone that prosperity by factious opposition to a measure that they know they cannot in the end defeat.

A Terrible Blizzard.

DALLAS, Tex., Feb. 13.—The thermometer was at 22 at six o'clock this morning. The wind went down to a moderate pace during the night. The ground was frozen today. Passengers from Kansas, Oklahoma, the Cherokee strip, and the Indian Territory today report the most terrible blizzard on record. A great many lives have been lost, and the suffering through the cold is intense. The greatest loss has been among the strip who are poorly prepared for the winter in the way of houses and clothing.

CHICAGO, Feb. 12.—The worst blizzard that has ever struck this city, so far as weather bureau records show for twenty-three years is raging here. Street traffic is greatly impeded, and walking is accompanied with great danger to life and limb. Many persons have already been injured by being blown to the ground and against the walls and posts by the wind. The velocity is 60 miles per hour, the highest ever recorded for this city, and, an almost double velocity of wind is blowing a blizzard in the western States.

Prof. Blair, superintendent of the Winston graded schools, expelled several pupils for going to the DeGraff hanging last Thursday.

Vance Against Simmons.

ASHEVILLE, Feb. 8.—The Citizen today prints a letter from Senator Z. B. Vance concerning his attitude towards Mr. Simmons, the collector of internal revenue for the eastern district. The letter is in reply to one written by the Citizen on February 1, asking the Senator whether he had preferred charges against Mr. Simmons, and as to his present attitude towards his confirmation. The letter follows:

TAMPA BAY HOTEL,
Tampa, Fla. Feb. 5, 1894.

EDITOR THE CITIZEN:—In answer to your letter of the first I have this to say: You know that in all transactions connected with the executive sessions of the Senate, including what is said and done in committee, my mouth is closed. I am at liberty, therefore, only to speak to you about my own attitude toward Mr. Simmons, what has not been done etc., but as to what has been done or probably will be done.

I want to say, first, that for myself and on my own authority I have filed no charges against Simmons. Aside from those which may have been filed by others, my attitude toward him is one of opposition: for the reason that, as chairman of the Democratic committee of North Carolina, he came to Washington and interfered in opposition to my recommendation for appointments under the government. Knowing that Mr. Ransom and I had agreed that primarily I should recommend all appointments in the west, whilst Gen. Ransom did the same in the east; and knowing that I had recommended Mr. Gudger for collector in my own district, and that Gen. Ransom opposed Mr. Gudger in *personal* grounds and favored Mr. Elias, he perverted and misused the power intrusted to him by the Democracy of North Carolina by *urging* and securing the appointment of Mr. Elias over Gudger. He also opposed my recommendation of Mr. Hale for a foreign appointment, which was virtually secured and was higher in grade than any given in the State.

Now, if he thought proper to volunteer his interference where he had no right or authority to do so, he should not object to the exercise of an undoubted right, by a Senator in the selection of appointments, bestowed upon him by the constitution.

To save trouble to the anonymous scribblers who are constantly slandering me in this regard and who report him as speaking of himself as "Simmons and the Democratic party," I announce, once for all, that I resent not only Simmons' interference with my rights as a Senator, but the insulting and defiant tone assumed both by him and them. I shall oppose Mr. Simmons' confirmation on personal as well as public grounds—grounds connected with his unfitness to hold the position for which he has been appointed.

My health is improving rapidly in this fine climate, and I hope soon to be in my seat in the Senate.

Very truly yours,
Z. B. VANCE.

MR. SIMMONS' LETTER

RALEIGH, N. C., Feb. 10.

To the editor of the *News Observer*:

Senator Vance, in a letter to the Asheville Citizen, dated February 5, 1894, and published in your issue of yesterday, declared himself opposed to my confirmation for the alleged reason that as Chairman of the Democratic Executive Committee of this State, I went to Washington and interfered with and defeated the appointment of Mr. Hale to a high grade foreign position, and of Mr. Gudger for Collector of Internal Revenue, and secured the appointment in his stead of Mr. Elias whom he antagonized. In view of this specific and public statement by the Senator of the grounds of his opposition to my confirmation, I am constrained to believe it proper for me to make a statement of my connection with the appointments referred to by him that those interested may judge whether I have transcended my rights on the one hand or usurped the prerogative of the Senator on the other.

Both as a citizen and as Chairman of the Democratic Executive Committee, I was on account of their acknowledged fitness and eminent party services, ardently in favor of the appointment of Mr. Glenn for Attorney of the Western district and of Messrs. Jernigan, Robbins and Henry for the best obtainable positions in the foreign service of the government. Some of these gentlemen had appealed to me in very urgent terms to go to Washington in their behalf. I cheerfully yielded to their solicitations in this respect because I thought they deserved the recognition they sought as a reward for honorable and faithful public services, and I felt they had the right to call upon me as the Chairman of the Executive Committee of their party to assist them to that end, to such extent as I might be able. I was opposed, as was also Senator Vance, to Mr. Elias for District Attorney, but I was not opposed to Mr. Gudger for collector. I had taken no part in the contest for the latter position, and the appointment of Mr. Gudger would have been entirely satisfactory to me. Mr. Hale had requested me to endorse him for the position of Consul General to London, a position which pays about $50,000 per annum, I am informed, and I had not complied with his request, because I did not think him entitled to absorb all the patronage in this service which might be accorded to North Carolina. This was the position which I occupied with reference to these gentlemen when I called upon Mr. Cleveland and the Assistant Secretary of State Josiah Quincy. I had had no communication with Senator Ransom concerning the appointment of either Gudger or Hale, and did not then know his attitude towards them nor towards Ellias, except that he was opposed to him for District Attorney. When I went to the White House I did not expect to allude to the contest over the collectorship. I went simply to advocate Mr. Glenn and the other gentlemen first named and did so with warmth and ardor. I spoke of Mr Glenn's opponent, Mr Elias, in such high terms of praise as I thought then, and now think him entitled to receive. When Mr. Gudger was mentioned I spoke of him in equally as high terms of praise, I became satisfied however, before the interview closed, that the President would appoint Mr. Elias, either District Attorney or Collector, and in response to a question I expressed the opinion that there was a more general crystalization of sentiment in favor of Mr. Glenn for District Attorney than there was for Mr. Gudger for Collector, there being at that time quite a number of strong candidates for the latter position and for this reason, I expressed the belief that there would be greater disappointment in the party if Mr. Glenn failed to receive the position of District Attorney than there would be if Mr. Gudger was not appointed Collector. I did not advocate the appointment of Mr Elias nor oppose the appointment of Mr. Gudger for Collector.

In all I did and said in this behalf I was actuated by no thought or purpose of antagonism to Senator Vance or favoritism to Senator Ransom, for I then regarded both of them as my friend but I was moved and influenced purely and simply by what I thought to be my duty to the party in the interest of harmony and right.

With reference to Mr. Hale and his aspirations for a high grade foreign appointment, I will state generally and briefly, that I have never advocated him for any position, and I have in the exercise of my right of personal opinion at all times denied his claim to precedence over all other North Carolinians in the distribution of the foreign patronage of the government.

During my conference with the President (I have had but one with him since the election) the claims of Jernigan, Robbins and Henry were discussed, but nothing was said about Mr. Hale. During my stay in Washington on this visit I called upon Assistant Secretary Quincy twice, once of my own accord and the second time at his suggestion.

On the occasion of my first visit, made solely for the purpose of urging the recognition of Messrs. Jernigan, Robbins and Henry, I was told by him that it had been suggested and claimed that Mr. Hale ought to have the next best place in the foreign service given to North Carolina. From this claim I dissented and expressed the opinion that he was not entitled to precedence over such gentlemen as Robbins, Jernigan and Henry, and that it would be unjust to set aside the men who had borne the heat and burden of the fight, then just ended in victory, for Hale. I knew of nothing in his political career which entitled him to such paramount consideration and I believed and said if he were appointed over these gentlemen it would create great dissatisfaction in the party. In taking this position I acted from a sense of duty to the party and without feelings personal to anyone. This is the sum of my so-called interference with these appointments. Senator Vance says my tone has been defiant and insulting to him. He has been misinformed. I have neither privately nor publicly given forth any utterance which could make me amenable to this charge. I have no desire to make an issue with Senator Vance regarding my right to express an opinion to the President, whether of advocacy or opposition to claims of an aspirant from this State for a Federal position requiring senatorial confirmation. That is not the issue made by the facts in this case. But I do insist and maintain that I had a perfect right to do what I did, and that in doing it, I did not in fact, (as I certainly did not in intent), either usurp or invade the rights of the Senators from this State.

Yours truly,
F. M. SIMMONS.

A Romantic Marriage.

ATHENS, Ga., Feb. 7.—Judge J. W. Proctor, of Glenwood, Fla., and Miss Elizabeth Maddox, of this city, were married today. Neither had seen the other until one hour before the ceremony was performed. Their acquaintance, engagement and all arrangements had been made by correspondence.

Rev. S. D. Adams died at Weldon, on last Monday, aged 64 years.

Marion Butler has been elected president of the National Alliance with a salary of $3,000 a year.

Three years ago Cynthia Reeves died at Shelby, and at her request all her jewelry was buried with her. Recently unknown parties dug into the grave and robbed the body.

The superior court of Harnett county abruptly closed last week because of the burning of the building temporarily used as the court room. The court house had been burned two years ago.

Br. Bull's Cough Syrup the best! The whole family say so. Mr. Joseph Miciotta, Stanwix Hall, Albany, N. Y., writes from that famous old hostelry: "I had a very bad cough. I tried different cough syrups and they did me no good. A friend told me to try Dr. Bull's Cough Syrup, and I did, using three bottles in three weeks and it cured my cough. I always use it for cold."

T. B. WOMACK. R. H. HAYES.

WOMACK & HAYES
LAWYERS,
PITTSBORO, N. C.

Judge WOMACK will be in the office on the first and third Mondays of each month and during courts.
Dec. 21, 1893.

THE EXPERIMENT STATION

At Raleigh, N. C., Presents Matters of Interest to Agriculturists.

Its Publications Are Free to Those in North Carolina Who Really Desire to Read Them.

JANUARY 27, 1894.

No Distribution of Plants, Seeds, &c.

The Experiment Station has no supply of seeds, plants, &c., for general distribution, and correspondents should remember this fact and not write for them. It does not attempt to keep a supply on hand for the reason that it is not in the province of its work to distribute common seeds, and besides there are nurserymen and seedsmen who make it their business to keep these stocks and can fill your orders. Occasionally the Station distributes one or two varieties of new seeds or plants, when they are promising, but unless you see a distinct announcement of this fact, please do not make application to the Station.

The Experiment Station Bulletins.

The standing offer is made to send the bulletins of the Station to all in the State who really desire to receive them. Thousands of farmers have already taken advantage of this offer. Unless you really want to be benefited by them, please do not apply for them. If you desire to read them, write on postal card to Dr. H. B. Battle, Director, Raleigh, N. C.

Formulas for Complete and Home-made Mixtures for Cotton and Corn.

1. Stable manure,	600	lbs.
Kainit,	200	"
Acid phosphate,	800	"
Cotton seed,	400	"
	2,000	lbs.
2. Kainit,	200	lbs.
Acid phosphate,	660	"
Stable manure,	600	"
Cotton seed meal or fish scraps,	600	"
	2,000	lbs.
3. Kainit or salts,	200	lbs.
Acid phosphate or bone meal,	800	"
Stable manure with yard scrapings and leaves,	1,000	"
	2,000	lbs.
4. Acid phosphate or bone meal,	600	lbs.
Ashes,	200	"
Stable manure,	600	"
Rich earth or yard scrapings,	600	"
	2,000	lbs.

These are given as suggestions. Individual requirements may need somewhat different proportions with a change of ingredients at hand. Compost should be laid down under shelter if possible, and on stiff clay foundations and levels so that no leachings may run off. About six weeks before ready to use, put down a layer of stable manure three or four inches thick, then a thinner layer of cotton seed (if this is used) then a layer of acid phosphate, and finally a layer of kainit. Each layer should be thoroughly wet after it is put down. Keep at layers until heap is built up three or four feet. Then cover with a layer of dirt to protect it and prevent leaching from rain. Examine from time to time and wet the heap if there is undue heating. At the time for hoeing to the field, the heap should be cut down from top to bottom and mixed thoroughly as possible. When ashes are used it is best not to allow them to come in contact with the stable manure, as there might be some tendency to decompose it.

A dry mixture about equal to the ordinary complete ammoniated fertilizer would be:

Acid phosphate,	1,200	lbs.
Kainit,	200	"
Cotton seed meal,	600	"
	2,000	lbs.

These can be easily mixed at any time before using: a large, tight box or wagon-body is very suitable. Have two men stand on opposite sides and mix with hoes. If materials are dry, they can be easily and thoroughly mixed at a nominal cost. Do not expose to weather before use. H. B. BATTLE, Director N. C. Experiment Station.

Soy Bean: Beans Ought to be Planted.

A correspondent writes: "When is the right time to sow (or plant) soy beans? What kind of soil and how should it be prepared for same? How do they compare with black peas as a feed and land improver? By giving this information you will greatly oblige."

Soy beans should not be sown broadcast, but planted in hills or drills 2½ or 3 feet apart according to richness of soil. If in hills, 15 to 24 inches is far enough apart in the row. They will doubtless grow on any soil that corn will grow on, and may be planted at the same time as corn, which gives a long season from March to July. It is a good plan to plant in the corn rows between the hills or stalks of corn. If corn is grown for silage, the beans can be cut with the corn and will add greatly to its value. The upright growth of soy beans leaves room for cultivation, and this should be accorded to check the growth of weeds.

As food for stock, the soy bean is one of the richest legumes that can be grown. In chemical composition the dry matter of soy-bean-silage and black-pea-vine hay differ more in fat and other carbohydrates than protein. The roots of soy beans bear numerous tubercles, which aid it by gathering nitrogen from the air the same as those of the pea-vine or clover roots. There is no spreading by running vines to shade the ground, which is one of the potent factors in soil improvement, hence soy beans must be planted near enough for shade. On poor soil there should be one plant every 2x3 feet and from that up to 2x3½ feet. It is usual to plant 2 to 4 beans in a hill, as it makes the stems finer, and they are hard and wiry at best. They are well suited to grow in any part of this state and can be depended on for good crops of seed. To save the seed the stalks should be pulled or cut and stacked up loosely as soon as leaves and pods have changed from green to a golden hue, and when dry threshed out. The pods should not be hand-picked, because there are too many and with only one to three beans in a pod it will not pay. They will beat out very easily when ripe and dry.

LUMBER!

All kinds of LUMBER for sale at the
PITTSBORO SHUTTLE MILL
WEATHER-BOARDING,
CEILING AND FLOORING,
PLANED AND KILN-DRIED, OR ROUGH
Bills sawed to order at short notice.
Good Ceiling and Flooring already Dressed at only $1 20 per 100 feet.
B. NOOE, Jr.
Sept. 17, 1893.

as he who leaves them too long will learn to his cost, for the pods will open and the peas scatter upon the ground. This is a most desirable plant to raise for stock. It is also a good table bean, but requires a longtime in cooking and most people will have to learn to like its flavor. F. E. EMERY, Agriculturist, N. C. Experiment Station.

Lathyrus Sylvestris or Flat Pea.

The so-called Flat pea, Lathyrus Sylvestris, is closely related to the Vetches, but is a perennial. The other species of Lathyrus are commonly called vetchlings and have little agricultural value. All contain a poisonous alkaloid, but the introducer of the Flat pea claims to have improved or bred out the poisonous principle. The most extravagant claims have been made for this plant by its introducer. The improved plant originated in Germany.

In the spring of 1890 a small package of Lathyrus seed was received at this station from the English disseminator, about three-fourths of the package was sown on a trial plot adjoining similar plots of Lucerne, Spotted Medic and various clovers. The soil was a gravelly red clay naturally well drained and was enriched by a heavy dose of a complete commercial fertilizer. At the end of one month only a few very feeble Lathyrus plants were alive, and these were soon smothered by wild grasses and disappeared wholly. During the same time the neighboring plots of Lucerne, etc., grew finely.

The remaining Lathyrus seed was then sown in a box and kept on a shaded porch. At the end of six months about fifteen plants from one to two inches high were alive. In the fall these were transplanted to a row in the pear orchard on the Experiment Farm. The soil was a well enriched loam. All these plants were alive the next spring, but during the whole season grew only a few inches. Weeds and grasses were carefully removed by hand every two or three weeks. The next spring eleven of the plants were removed from the orchard and set in a single row on a rich and mellow terraced hillside where they have remained since. The plants so far have not flowered, and of course no seed has been formed. The plants grow flat on the ground, too low to be mowed, and as new leaves grow at end of stem the older ones behind rot. From its behavior with us Lathyrus Sylvestris promises no practical value as on account of the low vitality of the seed and the extreme slowness of growth of the plant. On good or average soil it is certain to be overpowered and smothered by Crab and Bermuda grasses and weeds.

If this plant possesses any economic value it will be for the sand-hill region, where wild grasses and weeds are less intrusive. We cannot advise anyone to invest largely in this plant at present. The seed now costs $1.00 per pound and is advertised by most seedsmen. GERARD MCCARTHY, N. C. Experiment Station.

Advanced Meteorological Summary for North Carolina, December, 1893.

The N. C. State Weather Service issues the following advanced summary of the weather for December, 1893, as compared with the corresponding month of previous years:

TEMPERATURE. The mean for the month was 44.1 degrees, which is 1.1 above the normal. The highest monthly mean was 51.1 at Wilmington; lowest, 37.2, at Blowing Rock. The highest temperature, 76 on the 1st at Weldon, on the 2d at Tarboro; lowest, minus 5 on the 5th at Rockfish. The warmest December during the past twenty-two years was in 1889, mean, 52.6; coldest December during past twenty-two years in 1876, mean 34.2.

PRECIPITATION. Average for the month, 3.75 inches; this is 0.85 inch below the normal. The greatest amount was 5.88 at Washington; least amount, 0.78 at Mocksville. The wettest December in twenty-two years occurred in 1884, average, 6.77; the driest, in 1886, average, 0.93 inch. There was only one day with snow of any considerable amount; greatest total snowfall reported was 7.00 inches, at Hendersonville. Unusually heavy sleet occurred on the 4th in the vicinity of Goldsboro and Fairmont.

WIND. Prevailing direction, southwest. The normal direction is northeast. Average hourly velocity, 9.4 miles. Highest velocity, 60 miles per hour at Kitty Hawk on 5th.

MISCELLANEOUS. Thunderstorms were reported on the 3d at quite a number of places in the eastern and central part of the State; at three stations on 16th. Sleet or hail on 3d, 3rd, 4th, 5th, 14th. Snow on 4th, 5th, 15th, 17th, 31st. Halos on 13th, 20th, 22d, 25th. Meteors were observed on the 11th, 27th and 28th. On the morning of the 30th an unusually large twilight one was observed in the east.

Cold Waves.

Cold waves are those sudden changes from high to very low temperature which constitute the most noteworthy feature of winter weather in the United States. They are produced by the flow of masses of cold, dry air from the regions east of the Rocky Mountains in British America, towards the south or southeast. During the long winter nights of the Arctic regions dry, clear air accumulates in deep layers which is cooled by radiation to a temperature many degrees below zero and then commences to flow towards any place where warm air is ascending, as it does in the low pressure areas or storms which constantly pass from west to east across the United States.

A "low area" is produced by the air, somewhere becoming heated from unknown causes, above the surrounding atmosphere. This excessively heated air ascends and air is drawn in below from all sides to replace it. That drawn in on the south to east side is warm and moist; that drawn from the north to west side is dry and cold. The cold wave follows after the low area as it moves eastward. The severer and prolonged cold waves are associated with extensive areas of high pressure. Their rate of progress averages eight hundred miles in twenty-four hours.

It is of great advantage to many business and agricultural interests to know in advance when the temperature will fall quickly and decidedly, besides affecting the comfort and health of thousands of people.—C. F. VON HERRMANN, Meteorologist, N.C. Experiment Station.

Analyses of Fertilizers.

The North Carolina Experiment Station will issue in a few days complete analyses of samples taken during the spring and fall season of 1893. This will give the standing of the various fertilizers on sale during 1893, together with the comparative value of the unmixed ingredients at the seaboard. Tables of freight rates on the railroads will be given so that charges to nearly all interior towns can easily be seen.

This bulletin list will be sent to all names on the station publication list.

During the spring season of 1894, analyses will be promptly made as soon as samples can be taken by the official inspectors. These analyses will be printed every two weeks, but will only be sent to those who specially apply for them. One application only is necessary for the whole series of bi-weekly editions. Those who are interested in these fertilizer analyses are advised to make application on postal card to Dr. H. B. Battle, Director, Raleigh, N. C.

QUESTIONS AND REPLIES.

The Station will be glad to receive questions on agricultural topics from any one in North Carolina who may desire to ask for information. Address all questions to the "N. C. Agricultural Experiment Station, Raleigh, N. C." Replies will be written as early as possible by the member of the Station staff most competent to do so, and, when of general interest, they will also appear in these columns. The Station expects, in this way, to enlarge its sphere of usefulness and render immediate assistance to practical farmers.

Note.

In a recent press article, in referring to saltpetre as a fertilizer, the writer had in mind Chili saltpetre or nitrate soda. There is also a salt called the nitrate of potash, which of course contains potash in addition to nitrogen. As such it is a valuable fertilizer. But Chili saltpetre is not a complete fertilizer, and the ingredients must be added to it. This is so with either form, but in the case of nitrate of potash only acid phosphate or some form of phosphorus acid is needed to make it a complete fertilizer. The Chili saltpetre (nitrate soda) was meant because it is the only saltpetre that has been used agriculturally.—H. B. BATTLE.

Satsuma Orange Trees.

Will you please furnish me with information about the Satsuma orange trees at your station?—M. W. C., Tallahassee, Fla.

(Answered by W. F. Massey, Horticulturist N. C. Experiment Station.)

The Satsuma orange trees are dead. The cold of last winter finished the last of them. They will stand a cold of 18° to 20°, but lower than this hurts and finally kills them. On our southern coast, I believe they will do well. They will stand our ordinary winter, particularly as they grow older, but a winter like that of 1893-94 will always destroy them.

Keeping Nitrate of Soda.

Please let me know how I can keep over from one season to another a lot of nitrate of soda without loss. I am afraid of keeping it in bags, as the bags rot in time and it becomes saturated with the liquid and waste. I am trying to keep it in boxes in the house, and I notice some oil barrels and imagine there is no sign of leaks. Cover them with about three inches of dry packed earth.—S. D. M., Salem, N. C.

(Answered by H. B. Battle, Director, N. C. Experiment Station.)

The reason that Nitrate of Soda absorbs moisture is the same as that given for Kainit in the newspaper article which you noticed. If therefore the Nitrate of Soda can be put in a box or barrel so that the air can not well get to it, it can not absorb moisture and become wet and lumpy. The plan that you suggest of placing it in oil barrels and covering with dry packed earth is a good one.

The loss resulting from absorption of water and leaking would depend entirely upon conditions of the atmosphere, exposure, and causes similar.

Cover and Grass for Loamy Land—Poisonous Clovers.

[illegible] grasses for light [illegible] Write better for [illegible]

(Answered by F. E. Emery, Agriculturist, N. C. Experiment Station.)

You will find orchard grass the hardiest and most [illegible] grass you can use for hay. To thicken the stand and improve the hay, Kentucky blue grass is a favorite. White and red clover flowers near the time of both grasses. These make fine hay, and will grow well if treated to an occasional coat of stable manure. You will hardly make grasses profitable without this manure. Probably you could get much more clean cash out of annual clover grown for seed. It should be sown in August or any time in the fall when the soil is likely to be moisture enough to give the little plants a fair start, so that early winter frosts will not pull them out of the ground. This clover will ripen in May. You can feed the straw, and the seed should sell for $5 or $6 per bushel.

Our experience with chufas is that there has been too small a yield to compare with peanuts, though we have not turned hogs on them. Some of our farmer friends have had experience with them and have been beaten by not intensively growing peanuts. They will hereafter grow only peanuts for hogs.

The Cultivation of Onions and Irish Potatoes.

I have [illegible] fifty heads of cool state [illegible] Will [illegible] Please [illegible] also, [illegible] What is the best way to [illegible] Irish potatoes? Is [illegible] good as stable manure? [illegible] N. C.

(Answered by F. E. Emery, Agriculturist, N. C. Experiment Station.)

It is hard to grow a first-class crop of onions on land that has not been cultivated in vegetables and heavily manured for some years before. You do not say anything about the previous quality of your land, nor what kind of loads or manure you applied, nor the quantity of the manure. Manure from highly fed animals and not of too strong a character is a very different article from ordinary yard manure. Fifty ordinary loads of ordinary manure on ordinary farm land will not grow a fine crop of onions, particularly if the land is of a clayey character. You cannot make land too rich for onions. On the land you name we would advise the addition of not less than 700 to 1,000 pounds of a complete commercial fertilizer, such as is made for tobacco growing, in the furrow under the onion rows. If you intend to grow ripe onions you should always sow the seed in February, as you can thus raise better onions than you can from sets. To raise early green onions it is best to plant sets of the White Pearl onion in October. Seed would do just as well for these if sown in September, but the uncertainty of our fall weather and liability of dry weather at this time tend to the germination of the seeds at this time rather uncertain. We therefore advise sets for fall planting. For spring sowing use seeds of the Prize Taker, a large yellow onion, White Globe, Southport, Pearl or Giant Rocca (Italian). The White Globe is the best to grow.

Plant early Irish potatoes in February, with 1,000 pounds of complete fertilizer per acre, well worked in the furrow and cultivate thoroughly. Commercial fertilizer is better than manure for Irish potatoes, as they grow smoother and are less liable to scab. If the land has been in clover or peas the previous year, the crop will be much better.

MORTGAGE SALE.—BY VIRTUE of a mortgage executed to C. A. Bean by S. G. Farrell and wife on the 6th day of October 1893, and transferred to Albert Bullock, which mortgage is registered on pages 201 and 202 of Book "B. B", in the office of the register of deeds of Chatham county, I will sell for cash at public auction at the court house door in Pittsboro' on MONDAY, the 26th day of February, 1894, the land described in said mortgage, containing about 20½ acres, and adjoining the lands formerly belonging to the late Sam J. Neal and others.
Jan'y 25, 1894. B. A. LONDON, Attorney.

EXECUTOR'S NOTICE.—HAVING qualified as executor of John Lewis, deceased, I hereby notify all persons holding claims against said deceased to exhibit the same to me on or before the 25th day of January, 1895.
Jan'y 25, 1894. HOA BRYANT.

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