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THE PROGRESSIVE FARMER is the Official Organ of the North Carolina Farmers' State Alliance.



"I am standing now just behind the urtain, and in full glow of the coming unset. Behind me are the shadows on the track, before me lies the dark valley and the river. When I mingle with its lark waters I want to cast one lingerng look upon a country whose governaent is of the people, for the people, and by the people, "-L. L. Polk, July th. 1890.

## PRACTICAL FARM NOTES.

Written for The Progressive Farmer by the Editor and Guy E. Mitchell.

Don't forget to sow at least an acre in rape for your sheep, hogs and cattle in public favor and the many experi ments with it prove conclusively that it is "here to stay."

Our North Carolina Corporation Commission has, we are glad to hear, declined to change its order making ten tons the minimum carload of fertilizer. The railroads, which filed ex ceptions to the order, were given a hearing a few days ago.

The American Poultry Journal gives the following advice to a correspond ent: "Do not lose your best birds with roup, but prevent it by taking airslaked lime and springling over it a little turpentine, mixing well together and scattering the lime lightly over dropping boards and floor."

Mr. C. C. Moore's valuable essay on "Forage Crops for Cows," which ap at the Dairymen's Association and should be carefully read by all our cattle raising subscribers.

Mr. Middleton's experience with "the round bale" also deserves the attention of our cotton ginners and raisers.

The Department of Agriculture was authorized by the last General Assem bly to advertise for owners such lands as may be offered it for sale. If you bave forest, mineral, farming or truck ing lands, or water powers for sale, correspond with John W. Thompson, Assistant Commissioner, in charge of Immigration, Raleigh, N C.

The young farmers should take reliable farm papers. The young man Who starts out in the business of farm ing without the aid of a good agricul you know one who has made this mis take remind him of The Progressive Farmer and secure his subscription. If ne has a wife he is also doing her a grant injustice by depriving her of the Visits of a good farm and family paper, Which would do much to lighten the heavy burdens which the average farm r's wife must bear.

Ward is received at the State Da Parametric that France has published a decrea which determines upon measures Status. All trees, nursery stock, fruits, etc. are subject to inspection and re-Polion if found infested with the scale. This of course, is all right, so long as extreme or prohibitive measures are to protect itself from foreign fors, in Set or otherwise, but does it not occur their bands full fighting insects and which the ordinary farmer with lim-

fungous pests that it is about 'me for the United States itself to take such step and establish some such inspection regulations as will prevent the some genuine assistance to him in his diseases and new insects to further agricultural editor, having for many render farming and fruit growing haz ardous and unprofitable?

In a recent farmers' institute one farmer said: "Much of your success depends upon the good health and cheerfulness of your wife, doesn't it? Then why don't you take steps to lighten her labor and preserve her health? Most of you have good wells Department has issued during the year with wind mills and you have taken the pairs to run pipes to your barns because the expense was not great, and it saved you the trouble of either carry ing water to the barn or leading your stock to water. But I wonder how many of you have run water pipes to the house, thus giving your hard work. as reported by the United States ing wife the convenience of stepping to a sink and drawing the fresh water whenever it is needed, without the dicate the advisability of adopting labor of carrying it.

"I will tell you, fellow farmers, we should take better care of our wives. Why, in the community where I live, three farmers have buried their wives within the last six months. And it is my honest opinion that two of them were just worn out with hard work, and neither of them past fifty. The fell upon live stock in the field. The fine homes they had helped to build up are saddened by the absence of those mothers."

The value of a scientific knowledge

of the conditions which are met with in agricultural pursuits is constantly apparent. Secretary Wilson remarked the other day that there seemed to be a dearth of available men in different sections of the country thoroughly understanding soil conditions. He cited This valuable crop is steadily growing | the case of Saginaw, Michigan. In the early agitation of the sugar beet question the farmers near Saginaw grew some samples of beets which showed a high percentage of sugar. Coal was very abundant and capital plenty and everything seemed favorable for the erection of a factory. Then someone said that the river water which must be used had too large a percentage of salt and this killed the proposition. Now, it is found that the river was maligned and so work is pro gressing along the original lines, but Saginaw has lost the advantage of a good start through an ignorance of chemistry of soils. A case has come before the Department from California. An orchard of 2,500 acres was set out, the intention being to irrigate the trees from a lake. Agricultural chemists analyzed the water of this lake and stated that it contained too pears in this issue met with great favor | much alkali for the purpose intended Nevertheless the planting went ahead. and now the trees are dying and the Department is appealed to to see if anything can be done. In other sections of the West lands are being ruined by irrigation, the alkali in them being brought to the surface by the very irrigation necessary to plant growth. The remedy here, the Secretary states. has been found to be underdrainage.

The excellent work which is being done by the Department of Agricul ture in its various branches is coming to be very generally recognized, and each particular line of work or investigation is at least to some extent credited and appreciated by farmers, growers or experimenters especially interested that work. The Department is now a pretty big affair and its work taral paper, makes a great mistake. It ings are as free from bias as any branch of the government. This is as it should be, as the work is mostly of a technical character, requiring special qualifications and training. There is one divis ion, however, whose praise is seldom sung and whose employees seldom, if ever, find their names in print, yet whose work, could it be recognized, is seen in every published record of an experiment or discussion, or bit of in struction or advice, which issues from the Department. This is the office of Secretary Wilson's editor, presided to be taken to prevent the invasion of over by George Wm. Hill-the Pub'i-France and her province of Algeria, by cations Division. During the year the San Jose cale from the United 1898 five hundred and one publications were i sied by the Department, all passing Mr. Hill's or his assistant, Mr. Arnold's, careful scrutiny, during which process many changes were made in manuscripts looking to brevnot adopted; every country has a right ity, elimination of technical and unin telligible terms and the production of articles as practical and common sense to farmers and others who now have as possible-in a word, something

ited time, can pick up, glance through quickly, and flad plain, easily understood suggestions which will be of whole world from sending us new plant every day work. Mr. Hill is a veteran years edited the Farmers' Review, of Chicago, the first issue of that paper having been written entirely by him self, even to the story on the last page. During the fiscal year 1898 he superintended, for the Department, the distribution of over six million publica tions and in the year just ending this figure will be largely increased. The in the neighborhood of 600 publications, or two for every working day. In 1893, the number published was only

> Three hundred and sixty seven deaths from lightning strokes last year, Weather Bureau, to say nothing of property destroyed, would seem to in every preventive possible against this subtle fluid of the air and the erection of lightning rods, providing these are effective. In 1898 reports were recesved of 1 866 cases of buildings being destroyed or damaged by lightning, aggregating a loss of \$1,440,000. During this year 700 damaging strokes Weather Bureau reports show the interesting fact that a large proportion of the live stock so killed was found in close contact with wire fences, and that these wire fences were not provided with ground wires. Ur questionably wire fences, as now constructed, cause large losses each year, but it is quite evident that a consider able percentage of damage may be avoided by the use of ground wires at frequent intervals in the construction of the fences, thus allowing opportunity for the current to discharge itself into the earth. Some of the reports show that the lightning struck the fence at a considerable distance from

the point where the stock was killed.

It has often been stated that lightning rods are largely going out of use and that they are no longer considered eff ctive. It this latter statement the case in fact? The Weather Bureau states that while few if any conduct ors are absolutely complete safeguards, almost any conductor is better than none and that conductors are essential to anything like security. In cases of sudden enormous discharges of electricity, conductors may be like river channels in time of flood, unable to carry off safely the full current. A general discussion by the Bureau of the need for lightning rods concludes that all barns and exposed buildings should have them. Ordinary dwelling houses in city blocks have not the need for rods that scattered houses in the country, especially if on hillsides, have. The iron rod is as efficient as ounces to the foot and be in the form is of great importance. The best now ready. As the author says: ground connection possible is, for some flashes, a very poor one. "Bury the or running water, if possible." The top of the rod should be plated or in some way protected from rust. Independent groundings are better than Chain or link conductors are of little lightning rod being struck, should not necessarily condemn the rod. Any part of a building, if the flash be of a certain character, may be struck, or not. Fortunately these are exceptional cases. The great majority of flashes in our latitudes are not so intense but that a good lightning rod, well grounded, makes the most natural

path for the flash. It is not wise, the Bureau experts say, to stand under trees during thunder storms, especially oak trees, in door ways or barns where are draughts of air, close to cattle, or near chimneys or fireplaces. Small articles of steel do not have the power to attract lightning as is sometimes supposed. "Finally," it is stated, "if you are in the vicinity of a person who has just been struck by lightning, no matter if he appears dead, go to work at once to restore consciousness. Lightning frequently causes a temporary paralysis of the respiration and the heart which, if left alone, will deepen into death, but intelligently treated, will generally result in recovery."

## AGRICULTURE.

AN IMPORTANT MATTER.

Corn not already planted for ensilage, should be planted as quickly as possible as the time is getting late. There is, however, yet ample time to make good, fairly matured silage corn before frost. We wish that more of our readers had silos into which to put the crop when ready than is the case at present. A silo is the cheapest barn which a man can build in which to store his crops, and he can there store it in such form that when it comes out, it comes out succulent and appetizing, whatever may have been the weather conditions when the crop was harvested. It is food saved in such shape as to be the most palatable and nutritious for cows and sheep and to be acceptable and sustaining for both horses and hogs. We have published repeatedly full instructions for building a s lo, both in the cheapest and in the most permanent form. For from 50 cents to \$1 00 per ton of capac ity, a silo can be built and completed, and the man who leaves his crops wasting in the field when for such a sum as this he can have them fully protected and in the most convenient form for feeding, is doing both himself and his stock a great injustice. - July Southern Planter.

Says Prof. L. H. Bailey, of Cornell in an article on "A New England Country road," in The Outlook: "The common notion that the agriculture of New England is on the decline is a myth. The agriculture is only chang ing. Rural New England is prosper oue. The highway from Springfield to Hartford and Portland runs through as thrifty a country as one could hope to see, and the one in lustry is farming. It is not a district of summer boarders, nor of suburban res dence. The clean, well tilled fields, snug barns, ample and cozy houses, all bespeak a happy and presperous people. These homes have been paid for from the land, and they are replete with comfort. No other country can show such kingly farm homes, in such numbers, as America. There is a flavor about these New Eng land farmsteads which suggests thrift, frugality, stability, contentment. E30 nomic conditions have drawn people together in the last two generations. Cities have grown. Conditions are slowly changing. People are desiring to extricate themselves from the city. There is a perceptible movement countryward. The country is improving and civilizing The readjustment must

Every farmer and farmer's son should have a copy of "Practical Agriculture," by Charles C. James, M. A. Deputy Minister of Agriculture for Ontaria, formerly Professor of Chemis try at the Ontario Agricultural Colthe copper; it should weigh about 6 lege. The American edition, edited by John Craig, Professor of Horticulture of a tape. The grounding of the rod in the Iowa Agricultural College, is

"The purpose of this book is to aid | the grass. the reader and student in acquiring a earth plates of the rod in damp earth | knowledge of the science of agriculture | as distinct from the art of agriculture -that is, a knowledge of the 'why,' rather than a knowledge of the 'how.' The science of agriculture | inch length and feed about 2 bushels to connections with water or gas pipes. may be said to consist of a mingling of a cow daily. If weather is favorable chemistry, geology, botany, entomoluse. The fact of a building having a logy, physiology, bacteriology, and other sciences, in as far as they have a bearing upon agriculture. The aim has been to include but the first principles of these various sciences, and whether there is a rod on the building to show their application to the art of agriculture.

years' teaching at the Oatario Agricul tural College, the author believes that the rational teaching of agriculture in | so that we get for the silo corn, beans, public and high schools is not only pos sible, but would be exceedingly profit able. An intelligent understanding of cut for silo finding silage from corn the science underlying the art of agriculture will add much interest to what is otherwise hard work, and as a nat ural consequence the pleasure of such work may be greatly increased. The residents of our towns and cities also will find that some knowledge of the science of agriculture may be of use to them, and may increase the respect and consideration for the calling that contributes so largely to the general the crop is easy grown, not at all wealth and welfare of this country."

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FORAGE CROPS FOR COWS.

Paper Read at the State Dairymen's Association at Concord, June 27th. by Mr. C. C Moore, of Mecklenburg County.

"There is a something that draws a man to dairy work; that it is that induces ones one to stick to a work that is so exacting and that requires 365 days work each 12 months, counting Sundays, Thanksgiving, 20th of May, July 4th, Christmas and New Years. I do not know what holds us, but it is true that once a man gets into work he is a prisoner for life.

"I as a boy spent my days selling goods and book keeping. During my business life at merchandising I had the financial management for five years of a firm doing a business of \$120,000 yearly; at times I thought it impossible to pull through panick years and while doing this work l thought it the hardest to manage to a success of anything I should ever attempt. That was easy compared to my work for the past nine years. have found more tight places to pull over in a little dairy business, aggregating \$8 000 per year, and harder work to get over them than I found in all my former occupations; because of the multitude of leaks found in dairy work. At one time I had employed a young man from Devonshire, England one ugly night in February.

"The young fellow was correct Dairying is an expense from January to January and the man who is not watchful will find that his milk has leaked away.

"One great cost of this work is feed ing. A dairyman must study the feed question and just as long as he makes all food needful there is hope of success. To buy cow food to produce milk

or butter will break quite a rich man. "What shall a man plant to produce ood for milk cows? I speak only from experience, so far as feeding for milk is concerned. Butter making may require different feeding I do not make

butter, so cannot speak on that line. "Corn is my favorite, it is at home and will produce more cow feed on any land than any plant I have tried. We plant every week or ten days from March 1st to August 1st if land is in

"Our first planting in March is of improved Golden dent and Gentry Early Market. Either variety will grow to good feeding condition in 90 days. O ring to the wet spring we did not plant this year until April 221. Gentry planted that day is now ready to testel out although the land has not been wet since planted. We spend much time preparing land for crops and think the extra work is good pay.

"Plant with drill in rows 31 feet; plants in drill 6 to 10 inches. When land will work the Thomas harrow is dragged over every week until corn is 6 inches high. If a rain falls the harrow is run over as soon as land dries enough to hold up a horse, after culture is with Globe's cultivator unless by reason of rain the grass starts on row; a small plow is then used to cover

"We try to plant corn every Satur day. This plan gives soiling for cows from July 1st to November 1st; to feed we cut 3 or 4 inches from ground with a short handle hoe, at barn we cut to 1 the corn harvester is used for half day cutting erough to feed 10 days.

"Sometimes a lot will ripen faster than we feed, we cut and shock for winter feeding.

"Corn for silo is planted very much as for soiling except that we plant 9 to 10 quarts soy beans per acre in same "From his experience of several rows with corn at last working. Peas of running variety are sown. The corn harvester clips everything on the row peas, weeds and Means' grass. Where other farmers would strip fodder we nearly ripe to be better for milk mak ingthat that cut at roasting ear stage. If we had to give up all forage plants ex cept one, and had to choose that one, corn would be our choice.

"A variety is best, however, and we project with a lot of forage plants. For summer no lood we have found is better than sorghum. Cows are fond of it, the milk is sweetest I ever drank, checked by drought and if planted in Bound in cloth, well illustrated, 80 April two feedings are had from one

"Milo maize, Kaffir, Pop corn and Pearl millet are all good and are culti-

vated as the sorghum crop. The cows enjoy an unexpected change; for their pleasure we grow several of these crops each year-any of which may ripen ahead of consumption is cured for winter use.

"Sorghum and peas grown together is fine feeding. We take an acre on which 40 or 50 loads of manure is spread, before plowing, break with Hancock rotary plow five horses, follow with subsoiler two horses, roll down flat, sow 3 pecks peas, one half bushel sorghum, cut in with disc harrow four horses, drag twice with Thomas harrow. Just try this one time if you want feed. When sorghum leaves are well spread we begin to feed, and we always see an increase in milk flow.

"Peas and German millet produces our favorite winter forage to go with silage, on a clean, mellow seed bed. We disc in 3 pecks and roll. When peas begin to sprout 1 bushel of millet is sown and bushed in-the weeder is nice for that. To grow a big crop use manure liberally. Cut for hay when millet blooms-never mind condition of peas. We windrow same day we mow, let lay 24 hours if hot weather. then put in barn from windrow.

"If I can have plenty of silage and plenty of pea millet hay all winter I can make milk and not be depending on cotton oil mills or flour mills. Both are greedy concerns, ready to grab every dollar the milk man gets.

"I will not mention silo or silage. There are present these who can tell all about this great plan for winter feed. I do wish to speak about the dry corn fedder. Unless a farmer has more forage than he can haul to the barn or stack, by all means the corn should be cut close to the ground at fodder pulling, stack on tripod, leave until cured, husk corn off and feed-it will surprise any farmer to see cattle, horses and sheep pick at the corn stover for hours after having had a full feed in barn.

"We cut corn with the McCormick harvester, husk and cut with husker, feed the cut stover with silage during winter or mix with bran and meal and feed as mixed feed, or dry-it is good anyway.

'I have seen tons upon tons of stalks and fodder left standing in corn fields after corn was gathered and by December, and all winter, and even as late as June, have seen farmers who discarded such excellent fodder, haul cotton seed hul's 6 to 10 miles and pay \$3 to \$4 per ton for it. There is a leak through which many dollars from farmers is flowing to the bank account of the American Cotton Oil Co.

"If all the corn growing now in Cabarrus county could be saved entirely the new oil mill would find few farmers to buy their hulls.

"Just for the 'big' of the thing I throw away \$10 to \$15 each year for red clover seed. I read so much about red clover, and in fact, years ago I had such fine crops to grow that I just cannot drop it. However, the crop has failed with us for six years. Valuable as clover is. I am not convinced that it is better or more profitable than pea millet hay. We have concluded to drop clover and sow peas. Sow at every opportunity and on all available land from May 1st to July 20th. If we do not cut a vine the crop is a paying one.

"At Double Oaks we usually feed pea vines August, September and October. One or two acres are mown and raked when wilted and put in large cocks. As needed we haul to cows. Have had such out in three days rain but suffered no loss. Cutting a lot at one time is a saving of time, besides the wilting of vines is an advantage, as the milk will not taste so strong of the pea flavor.

"While red clover has failed for us, we have had great success with the crimson. We like it better each year and sow larger fields than we did before. We learned the value of this plant. We seed crimson clover with oats-sow in August or September-1 peck of crimson to 1 bushel of oats per acre. If land is moist at time of sowing we always get good results. We sow with rye, also with millet, and last August sorghum was tried-+ bushel sorghum seed to 1 peck clover. Cut sorghum as hay about the middle of October. When raked up we found a fine stand of clover, which went through winter safe and made a splendid growth in spring. We shall try same plan this year. Cut clover when coming in bloom-a tender, sweet hay

[CONTINUED ON PAGE 8 ]