

# PROGRESSIVE FARMER

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

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## Agriculture.

### THE DRAINAGE QUESTION.

Which is, After all, One of the Biggest of Farm Problems.

Correspondence of The Progressive Farmer. "In addition to what has already been said in the columns of your most excellent paper on the subject of drainage, I wish to add the following:

I never saw many open ditches that thoroughly drained the land. Every heavy rain or freeze fills in a place here and there and makes a stop-place for the water, and here it stands until the ditch is cleaned out again, spreading out in an effort to go by, and thus rendering the land soggy and sour, and therefore unfit for cultivation.

I have known farmers to cut as many as three or four ditches more than was really necessary to drain the soil, because they did not know or understand the true principles of drainage. One ditch cut at the right place and at the right time, and then immediately made "blind," either by the use of drain pipe or tile, or by using a three-sided box made of 8-inch plank; or, pine poles from which the bark has been taken, will drain the land far better than several ditches kept only partially open the year round.

It is by no means as difficult a task to blind ditches as many imagine; but there are some features which require special attention, or you will have a bungling job that will fall short of your expectations.

I have often thought there should be a tile factory in every county in the State, and in every other State, and I do not think it need be an expensive one either.

If your ditch has a firm bottom of clay, with a fair amount of judgment you can surely succeed with either a box or pole; but don't put in poles with the bark on. If you do you will soon have to do the work over, for it will soon become loose, drop down, and stop the water and clog the drain.

If the bottom is sandy or loose, don't use poles if you can afford either tile or plank; but if you must use poles, observe these rules:

(1) Skin the poles. (2) Put a piece of plank not less than 4 inches wide crosswise the ditch under either end of the poles to prevent them from sinking into the mud. (3) Lay down about 50 feet of each ditch at a time, and fill up and tramp with your feet and let remain until after a good rain or two. (4) Dig a hole at the end to allow the loose mud or sand to flow out to prevent clogging. When you are satisfied that the bottom is firm, lay another section and continue in this way until you have finished. Never blind a main ditch that sometimes carries large quantities of water; let these remain open; but be sure to keep them open, for if they fill up by freezes or rains the "blind" ditches leading into them will surely clog.

The cost of blinding your ditches will not equal the cost of cleaning off and out if left open; and besides, you can get back a portion of the cost of blinding from the crops that grow over them and from time saved in having longer rows and not so much turning.

One of the hardest jobs on many farms is that of cleaning off and out the ditches, and it is often the case that this causes neglect until they become so obstructed that bushes refuse to let briars be cut and briars are too contrary to allow the bushes cut; so the work stands undone, and as a natural consequence no crops are made and all is lost!

No better plan can be adopted in any kind of farm work than to do everything thoroughly and well. Keep the hoops tight and the leaks stopped; study your business, as merchants have to do; keep out of debt; raise your own corn, meat and potatoes; keep a good garden with vegetables of some kind in it both winter and summer. See that your hogs do not use the same bedding long enough for vermin to accumulate; keep ashes and charcoal in a trough under shelter where they can

have access to it at least once a day. Then write me results, and if not satisfactory, send in your bill.

Next week I shall have something to say on the stump question.  
WM. A. BARREY.  
Sampson Co., N. C.

### THE SIZE OF A GRAIN OF CORN.

Correspondence of The Progressive Farmer. What a small affair a grain of corn seems. Yet an aggregation of the grains of corn which are produced in one crop, on 40 acres of good corn land, seems of considerable importance.

An ear of corn is produced for the aggregate of the grains of corn which it contains. Yet almost all corn growers when selecting corn for planting select it by the ear, paying very little attention to the size or character of the grain.

During my 28 years' experience as a breeder of the corn plant, I have noticed that some individual ears in a field of corn contained almost twice as many grains as other ears. But their grains were narrow, thin, and sharp pointed, and grew on a large cob. An average sized ear of corn, such as is most generally grown in the great corn belt, may contain (and often does) 24 rows, with 1,000 or 1,200 grains, and not have as much corn in weight, as another individual ear of the same size, which contains but 16 rows, with but 700 or 800 grains. But the grains on an ear of the latter type are much wider larger and thicker. I have seen from my experience in corn breeding, in all of its numerous phases, that those individual ears which have the fewest and largest grains are the most progressive ones. In fact they are much more free from barrenness and its attendant degeneracy—dry rot, smut, nubbin-producing tendency, and low germinating power. Large grains of corn germinate more quickly than the smaller ones, provided they are equally mature. Their germinating power is also much stronger, on account of being more free from barrenness and inherited weakness. The writer personally knows such a variety of large grained corn that seldom germinates less than 100 per cent. Its grains have so much inherited vigor that their germs are not easily affected, as regards impaired germinating power, by unfavorable weather conditions prior to planting, or unfavorable weather or soil conditions after being planted. Truly a most valuable feature. And which, if it was universal in all the seed corn annually planted, would, in the writer's opinion, increase our average yield of corn to 100 bushels per acre eventually. But it is very far from being universal. In fact, a rare exception rather than the rule.

Large grained corn, from its inherited vigor, progressiveness, and high germinating power, germinates more quickly, and pushes the young plant on much more vigorously than does small-grained corn. This early gain, as it does, at one of the most critical periods in the life of the plant, makes a uniform and rapid early growth, (especially if all the grains in a planting are of about equal size and weight) good even stand, and uniform and thorough pollination. With the result of doubling the yield of merchantable grain per acre. To many farmers this may seem to be a strong claim. But I will merely say: try it yourselves and be convinced.

To seek to bend to our will, and guide harmoniously to a triumphant result, the dimly understood, but minutely, and immutably potent forces of nature, that from time even prior to germination, control in the production of plant life, is certainly an endeavor calling for the highest mastery of the grandest study—the study of nature.

It has been well proven by several eminent experimenters that the largest typed seeds always produce the largest yield; yet most farmers pay little heed to this fact in selecting their seed corn. Besides producing the largest yield of grain, large grained corn best meets the requirements of modern millers.

J. C. SUFFERN.  
Platt Co., Ill.

### HARRY FARMER'S TALKS.

#### VI.

Correspondence of The Progressive Farmer.

Harry Farmer agrees with the writer who said: "The best crop grown on the farm is the boys and girls." Well, I love children and want to tell them and their parents something that they may not want to hear.

I said something in a former talk about going to school, &c. Father, mother, help your children with their lessons, encourage them to study their books, be a boy or girl yourself again. Get down with the little fellows and help them with their exercises. You know most of the teachers who are up with the times require nearly all the lessons written off. Some of you may not have an education, may not be able to read or write; if so, get your book and let your children teach you. On, how your children will enjoy your help!

The chores all done, little tots washed and put to bed; now you have from one to three hours these long winter nights to do head work. You have been cultivating the crops on the farm now cultivate the crop of brains awhile.

Your school teacher may not please you every time; he may not know much; he may be well educated, but know but little about teaching and less about children. But encourage him in every way and you will always be the gainer. Oftentimes these young people, fresh from school, make the best teachers, as they are more up to date. Never under any circumstances talk in a disparaging manner before your children about the teacher. If the child once loses respect for his teacher his work is done and the child is the loser. You are not perfect yourself and you must not expect it of school teachers.

Now a word to the boys and girls. Study hard and learn to read and write, make use of every minute, for your school days will be very short. You have so many nice books. Harry Farmer is glad that your road to an education is so much easier than that of your father or mother. Study your lessons well; be the best in your class. You must be a leader, not a follower. I saw these lines in a copy book several years ago. I believe they were written by the poet Longfellow:

"The heights by great men reached  
and kept,  
Were not attained by sudden flight,  
But they, while their companions slept,  
Were toiling upward in the night."

Work hard on that lesson at night so that you can recite it next day with ease. If you ever expect to climb, you will have to study at night, the days are too short to accomplish much. Fill your brain full of useful knowledge that you may make a useful man or woman.

HARRY FARMER.  
Columbus Co., N. C.

### WHEN TO SALT MEAT.

Secretary Bruner Calls Attention to a Bit of Bad Advice in Our Last Issue—The Paying Plan of Commissioner Patterson.

Correspondence of The Progressive Farmer.

I have read your Forsyth county farmer's plan for curing meat. It contains one sentence which is contrary to the best usages in producing the highest class of bacon, and is as follows: "Add salt while warm." The salting of meat before the animal heat has cooled out, will certainly aid in the assimilation of the salt, but it at the same time fixes or "sets" animal odors and flavors, thus imparting unpalatable qualities to the cured meat.

The object to be gained in the curing is the preservation of the meat in its most palatable form for the table—your own table or the table of the consumer to whom it may be sold. Its value is determined by its quality; its quality is determined by its curing; its curing cannot be of the best if salted while yet holding animal heat, and with it the odors of the hog. The aim of every farmer should be to produce the best and get for it the highest price the commodity will bring.

The Commissioner of Agriculture,

Mr. S. L. Patterson, published in the October, 1899, Bulletin of the Department of Agriculture (devoted to the "Hog and its Products," and which is free for the asking) an article on the curing of hams, which I will thank you to publish as part of this article; the object being to induce those who have meat to cure to adopt the best means to attain the best results. All of the hams cured by Mr. Patterson, and which he could spare, have brought 20 cents per pound. That is evidence of the superiority of his method.

T. K. BRUNER.  
Wake Co., N. C.

### COMMISSIONER PATTERSON'S PLAN FOR MAKING GOOD HAMS.

To make good bacon will require good hogs. By that is meant a medium weight hog which has been properly corn fed, and watered with clean water. The choicest bacon is made from hogs from 12 to 18 months old and weighing 125 to 200 pounds.

They are killed on the farms on a cold morning; well bled, well scalded and well cleaned. They should hang all day, be housed at night, not allowed to come in contact with each other, and out and salted next morning.

Do not cut them up the day of killing.

Do not salt the meat before the animal heat has cooled out. More meat is spoiled by the salting and packing in bulk before it is thoroughly cooled than from any other cause.

Cut out the backbone and pull out the ribs. Trim the hams and shoulders close. Leave no surplus bumps or points and make the cuts as shapely as possible. The trimmings are worth more made into sausage and lard than if left to mar the appearance of the cured meat. The sides or middlings should also be carefully trimmed, and one or two four inch strips cut lengthways from the thin part to be cured as breakfast bacon. This is important, as these cuts are much sought after, and bring 2½ cents more per pound than the whole sides, when properly cured.

When the meat has been properly trimmed then curing begins; use about one pound of ground saltpetre to 400 pounds of meat. That is a heaping teaspoonful to the ham, more or less, according to size. This is rubbed in on the flesh sides and around the bones. Use fine salt, and rub it in well, heaping it up on the flesh sides to some extent. Don't cut a gash for salt in the ham. If desired, one pound of sugar may be added to each 20 pounds of salt. The meat should then be packed up in piles on plank flooring of some kind, and raised off of the ground; a plank frame or large trough is better. The platform on which the meat is packed should be slanted so as to allow the melted salt to drip away. In about a week take down the pile, resalt and replace the pieces in the pile and let them cure for four or five weeks longer, according to size. When the meat is again taken up, brush off the salt and rub well with a tablespoonful of mixed ground pepper—red and black. If you prefer a body to hold this pepper, use a small quantity of good quality molasses, well rubbed on; then the mixed peppers. The joints are now ready to hang for smoking. With large wire needle or small knife, insert strong twine and hang in the upper part of the smokehouse, hook end down, and start a "smudge" or small fire made of green hickory, (preferred) or red oak, beech wood or corn cobs. Smoke every day for about three weeks, or until the meat has taken on the rich brown color desired; and your hams are now ready for bagging; or if preferred, bagging may be done at time of first hanging.

To bag the hams, make bags of common unbleached sheeting; drop the hams into the bags, hook down, and sew or tie up tight at the top. Then saturate the sacked hams thoroughly in a thick solution of ashes and hot water; or as others prefer, into a lime bath, made up as for whitewashing. These dips serve to exclude all insect pests and to preserve the color and flavor of the meat enclosed.

It is better to hang the hams in the darkest part of the smokehouse. Shoulders and breakfast strips treated like hams, will pay well for the trouble.

### THE COTTON GROWERS' MEETING IN MACON.

Secretary Allison Tells Progressive Farmer Readers What Was Done—The North Carolina Meeting Next Month.

Correspondence of The Progressive Farmer. In response to your request of recent date, will say: I have just received the papers from Atlanta, where they were left for publication, so could not comply sooner. The meeting in Macon, Ga., was a success. True several States were not represented, but their letters of encouragement were sufficient to let us know they were in full sympathy with the movement. It is very evident the planters of Georgia are in earnest in this matter.

The delegation from this State was cordially received and made to feel we were welcome in this great work. You know it was a State movement, and the call was by them to form an inter-State organization. As the full objects of the meeting were not fully known in the other States, it was deemed best to make a temporary organization.

The meeting was called to order by Mr. Harvie Jordan, President of the Georgia Cotton Growers' Protective Association, who was unanimously elected President (upon motion of North Carolina) of the temporary organization of the Inter-State Association, with Mr. Jno. P. Allison, of North Carolina, Secretary.

A committee of seven were appointed to report a plan of organization. Their report is as follows:

1. That an Inter State Cotton Planters' Association be organized.
2. That each State Association be allowed three representatives upon the Inter-State Executive Committee.
3. That the Inter-State Executive Committee be authorized to adopt a constitution and elect officers.
4. That the Chairman and Secretary of this meeting be authorized to act for the Inter-State Executive Committee until the same can meet and act.

This was adopted and a call made to the different cotton States to hold meetings and elect delegates to a meeting to be held in Atlanta, Ga., as soon after January as possible, the date to be fixed by the Chairman.

As you know, a delegation was appointed by Maj. W. A. Graham, Chairman of our State meeting held in Raleigh, in October. The following five of that committee attended the Macon meeting: Hon. S. L. Patterson, Col. B. Cameron, Messrs. F. A. Whitaker, J. W. B. Battle, and Jno. P. Allison.

There were several splendid addresses made in the meeting, but as this only to tell what was done, will not attempt any report of what was said.

Our meeting in October adjourned to meet again in January, in Raleigh, the date to be fixed by our President. At that time I hope the planters of the State will take sufficient interest in this matter to attend and send delegates that will represent their true interests.

JNO. P. ALLISON, Sec'y.  
Cabarrus Co., N. C.

### FOR FREE RURAL DELIVERY.

An enthusiastic plea for a wide expansion of rural free delivery is made in the annual report of W. M. Johnson, First Assistant Postmaster-General. He says that the extraordinary development of this system during the past twelve months under the stimulus of appropriations of \$450,000 for the fiscal year of 1899-1900, and \$1,750,000 for the fiscal year 1900-1901, is conclusive as showing that hereafter it must be a permanent and expanding feature of the postal administration. The service can now be extended as swiftly as Congress may direct or as the means permit, until it covers all those portions of the United States now reached in whole or in part by the more primitive methods of the postal service which have come down to us almost without change from colonial times. This change, Mr. Johnson believes, can be effected without excessive cost to the government.

## Live Stock.

### FOR WARTS ON HORSES AND CATTLE.

Correspondence of The Progressive Farmer. Occasionally warts and other unsightly excrescences will appear on the skin of young horses and cattle. The following method of treatment I have found to be very efficacious: Sandpaper the wart till it bleeds a little. Then powder blue vitrol and mix with vaseline to a thick paste and rub on the wart. If any of your readers are bothered in this way, I advise them to try the above method. I first saw it recommended in Hoard's Dairymen and know from experience that it is first-class.  
A. H. D.  
Cabarrus Co., N. C.

### THE PROBLEM OF WINTERING CATTLE.

Editor Wallace, of Wallace's Farmer, lives out in the country's greatest live stock region and knows a great deal by personal experience and observation of live stock and feeding problems. What he says below is worth study:

The greatest losses in the cattle business are not due to the flies and heat of summer, nor usually to insufficient pasture, nor yet to exposure to the inclement weather of the winter, nor even to the insufficiency of winter food, but mainly to the feeding of an improperly balanced, or, if you prefer, an improperly mixed ration.

It cannot be impressed too earnestly nor too often on the mind of the farmer that the animal cannot work miracles; for example, that it cannot make muscles out of carbon any more than it can out of water. Carbon is absolutely essential to the maintenance of heat and the storing up of fat in the flesh, but the flesh itself is made from what we call the albuminous or nitrogenous elements of the food. These can be used to keep up the heat, but never at a profit. They are too expensive.

Inasmuch as the exposure and severity of the winter requires an unusual amount of heating food, carbonaceous foods can be fed liberally during that season, but if flesh or muscle is to be increased—in other words, growth instead of fat—then the animal must have a supply of foods richer in muscle-making material.

No food on the farm is made up entirely of carbon and none made up entirely of albuminoids or muscle-makers. What we call carbonaceous foods are foods that contain more of the fuel and force elements than the animal requires; what we call nitrogenous or albuminous contain less. For example, corn and all its products are carbonaceous because containing these elements in excess of the requirements of the growing animal. Corn itself has no considerable excess of the elements required for the animal in process of finishing for market, and this is the reason why hogs and cattle both thrive so well when finishing on corn, which is our cheapest source of supply for carbonaceous grain food.

The large per cent. of animals kept through the winter on the farm are young and presumably growing, and the reason why they frequently come out as light in the spring and even lighter, than they went into winter quarters in the fall is because they are not fed a properly balanced ration. The farmer thus meets with a severe loss without knowing it. None of the animals have died, for, on counting, he finds he has just as many as in the fall. He is so used to seeing them come out in the spring thin that he thinks this is the natural order of Providence, or something else, and is not aware that unless he has made a gain he has lost the larger portion of the food they have consumed during the winter. He has simply used them as manure factories, and the man who does this is not likely to haul out the manure, at least until it has lost most of its value; hence, the feed he has given them is almost a total waste unless there has been a considerable advance in the live weight of the stock during the winter.

Unfortunately, the great bulk of

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