

Established 1840.

THE

Seventieth Year.

Southern Planter

A MONTHLY JOURNAL

DEVOTED TO

Practical and Progressive Agriculture, Horticulture,
Trucking, Live Stock and the Fireside.

OFFICE: 28 NORTH NINTH STREET, RICHMOND, VIRGINIA.

THE SOUTHERN PLANTER PUBLISHING COMPANY. - - - Proprietors.
J. F. JACKSON, Editor.

Vol. 70.

MAY, 1909.

No. 5.

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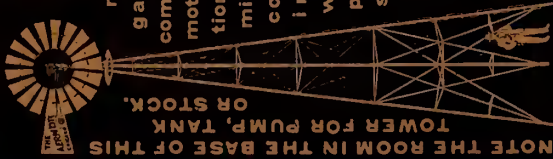
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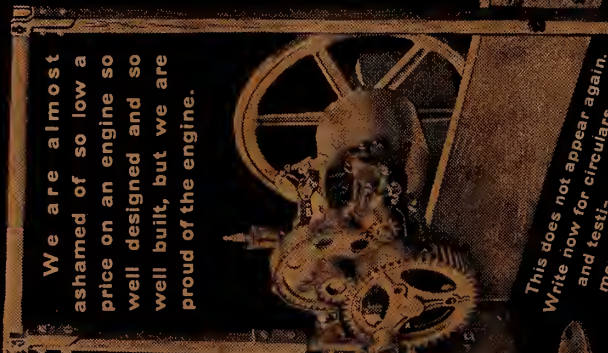
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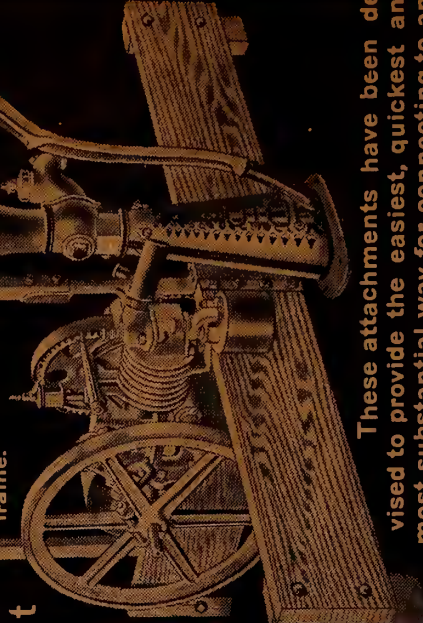
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Agriculture is the nursing mother of the Arts.—XENOPHON.

Tillage and pasturage are the two breasts of the State.—SULLY.

70th Year.

RICHMOND, VA., MAY, 1909.

No. 5.

Farm Management.

WORK FOR THE MONTH.

The month of April to this writing (April 20th) has been a fine, genial spring month, and following a similar condition of weather in March has enabled a great deal of work to be done in the preparation of the land for the crops and done with the land in the best of condition for receiving benefit. The result of this is that probably more land is now broken and being fitted for planting than ever before in the South. Indeed, the reports we receive indicate that the greatest area ever planted in the South will be put in crop this year if weather conditions continue normal during May. Whilst there is not an excess of moisture in the land, yet the early breaking of the land has so conserved that which is present that crops will find an abundance to start growth and, with the usual May weather, we may expect good stands and a fair start for a bountiful crop year. We would urge that care be taken to conserve the moisture by keeping the surface finely broken and free from crusting until the crops are planted and that cultivation be prompt and frequent after planting. In the States South of Virginia considerable corn is already planted and even in this State some has been put in. We would urge that not too great haste be made in this work. Whilst it is very tempting to plant corn in such weather as we are now having, yet past experience has convinced us that it is not a safe proceeding to plant corn until May. The land, though in nice order where advantage has been taken of the weather we have had for the past two months, is not yet warm and corn never starts well in cold land and rarely makes a continuous, quick growth, and this continuous, quick growth is very essential to the making of the best yield. The experience of years has been that we have almost always a cold spell of weather in the beginning of May, and corn planted before this is over is usually to plant over again. We had last year a fine time in April and many of our subscribers got land into good condition and planted in that month. In almost every case they had to replant in May. From the 10th of May to the 10th of June is the best time to plant white corn in this State. Yellow corn may be planted with a certainty

of maturing from the 10th of June to the end of the month, and we have known Golden Dent to mature in the middle section of the State planted as late as the end of the first week in July. The condition of the grass and pasture land is fine. Crimson clover and alfalfa have made wonderful growth during April and crops of these are now ready for cutting in many sections. The promise for the meadow hay crops is fine on all land in a good state of fertility. Pastures already are capable of providing fair grazing for stock in the middle and Eastern sections.

The report of the Department of Agriculture on the condition of the winter wheat crop on the first of April is an unsatisfactory one. The condition this year for the whole country is placed at 82.2 per cent. as against 91.3 per cent. a year ago, and as against a ten-year average of 86.6 per cent. This, coupled with the reduction in area planted—even if this should not be still further reduced by the plowing up of crops too much damaged to be worth harvesting, and of these there is said to be a considerable area in some States, though as yet we have not the official figures—indicate that the crop is going to be a much less one than the last. We doubt much whether the yield will be in excess of 400,000,000 bushels, even should conditions of weather be the best up to the time of harvest. The present condition is the lowest in any April since 1904, when it was 76 per cent., and the yield in that year was 325,000,000 bushels. This report and the report of existing stocks in the world showing 19,000,000 bushels less than a year ago had the effect of causing a rapid rise in price on the market and wheat was sold for as high as \$1.50 per bushel at one time. The price for cash wheat in New York is now \$1.40. Whilst no doubt market speculation has had considerable effect in making these high prices, yet the actual situation is such that demand has overtaken supply and the condition confronts us which we predicted more than a year ago. No doubt the effect of this will be to stimulate the seeding of as large a crop of spring wheat as possible in the Northwest, and this, work has already begun. Unless, however, a much larger

area than the average can be gotten in in the limited time available, the probabilities are that at the close of the harvest this country will find that it has little if any more wheat than will be needed to feed the people and provide seed for another year. It would seem probable, therefore, that we may have a permanently higher price for wheat than we have seen for many years. In the face of this discouraging report as to condition of the wheat crop throughout the country, it is gratifying to know that in Virginia our wheat crop is decidedly promising. The condition here is 97 per cent, as against 90 per cent. a year ago and as against a ten-year average of 85 per cent. In Maryland the condition is 96 per cent. as against 83 per cent. a year ago and a ten-year average of 87 per cent. In North Carolina the condition is 93 per cent. as against 91 per cent. a year ago and a ten-year average of 87 per cent.

Winter oats are still looking well and promise to make a fine crop and the condition of the spring oat crop is above the average, as it was seeded early and the weather has been all that could be desired for it.

In our last two issues we have written so fully on the preparation of the land for the planting of the corn crop that we do not know that we can usefully add more, but refer our readers to those issues. The great point to be aimed at is to have the land brought into as fine a condition of tilth as possible to the greatest depth possible and, to secure this, it should be disced, harrowed, rolled and re-harrowed until no clods or lumps of unbroken soil can be turned up. Until the land is in this condition, it ought not to be planted even if in order to secure this seed bed planting is delayed for a week or ten days. Perfect preparation of the seed bed is much more influential in securing a good crop than any fertilization of the land. Where every bit of the soil is finely broken and is in a condition to admit the air and the moisture thoroughly permeating it, the great root system of a corn crop can make available all the natural fertility in the land, and even though the land be not rich, a fair yield can be secured. On rich land such preparation will ensure a heavy yield if the season be normal. When ready for planting bear in mind what we said in our last issue as to careful selection of seed acclimated to the section in which it is to be grown, and have the seed well assorted, so as to be as nearly as possible of the same average size so that the planter may drop the seed regularly and thus ensure an even stand and avoid the necessity for replanting which rarely amounts to anything, as the replanted corn makes stalks which are not ready to receive the pollen at the time when it is being distributed by the first planted corn and therefore fail to make a satisfactory yield even if they make ears at all. If a crop makes a poor stand or if from any cause the stand is lost to any considerable extent it is far better to re-work the land and plant over again. Where land is badly infested with cut worms, these may be largely gotten rid of by distributing poisoned feed for them before the corn is planted or before it comes up. Mix Paris green with water and dip bunches of clover in this and drop them at intervals over the field, or cabbage leaves may be used instead of the clover. Bran mixed with Paris green and

then moistened with water and made into small balls and dropped over the field will also effect the same end. Where land has been plowed early enough and frequently and thoroughly worked before planting, these troublesome worms will, however, usually have been mostly killed. After the crop has been planted, let the work of cultivation at once commence. Never allow a crust to form on the surface, for this will not only prevent the proper growth of the plants, but will result in loss of moisture from the land. Use a harrow or weeder for the first two cultivations of the crop and thus do the work quickly and thoroughly and at the least cost. After the first two cultivations use a tooth cultivator, taking both sides of the rows at once and run this shallow all the time so as only to disturb the top two or three inches of soil. When the crop has gotten too tall for cultivating both sides of the rows at once, then use a tooth cultivator between the rows and still keep the soil level. Notwithstanding all that we have said and written on this subject of corn cultivation in the past twenty years, during the whole of which time we have been advocating level shallow cultivation of the crop, as a rule, and have shown by the result of numerous experiments made in nearly all parts of the country that this system gives the most profitable results, there are yet scores of farmers in the South who will persist in using a plow and tearing the roots of their corn to pieces at the first working and then lay it by with the plow and again cut the roots. Whilst we are not so foolish as to say that under no circumstances should a plow ever be put into a corn field after the crop is planted, because we realize that under certain conditions peculiar especially to our river low grounds such a use of the plow is not only permissible, but necessary, as was well shown by the article in the last issue from Mr. Ruffin; yet even in such cases the largest part of the cultivation should be done with a tooth cultivator and the plow be only resorted to to cover up the vines and weeds which grow between the plants and cannot be reached by the cultivator. In such a use of the plow the shallowest furrow possible to supply the earth to cover up these weeds should be run and the land be left as little ridged as possible. The idea that a furrow should be plowed to the corn at the last working in order to hold it up is all wrong. The corn will stand up as well without it as with it, even better, as the roots will not have been cut and these will have hold of a larger area of the land than if they had been cut during cultivation. The brace roots which are thrown out will get hold of the soil just as well without the furrow as with it and moisture will be much better conserved by reason of the less area of the land exposed to the action of the sun. Continue cultivation as long as possible to get through the crop without breaking down the stalks and before the last cultivation sow cowpeas or crimson clover in the crop and cover with the cultivator lightly. When planting the corn drop a few pumpkin seeds in every third or fourth row at long intervals. These will make a supply of pumpkins for the hogs and cattle in the fall, and this without at all injuring the yield of the crop. The Virginia Mammoth pumpkin is a good variety to plant.

The cotton crop bids fair to be again planted on a very

large area. Notwithstanding the fact that the price of the staple has been on the average below ten cents for all except the highest grades and that the cotton planters organizations are strongly urging a reduction of the area so as not this year to make another 13,000,000 bale crop, yet, from what we hear from our correspondents, the area now being prepared and planted is apparently as large, if not larger, than a year ago. We would like to see this area reduced and more of the land put into crops to feed man and beast, not so much to reduce the size of the cotton crop as to make its production more profitable. There can be no doubt but that with proper preparation of the land filling it with humus and working it well before and after the planting of the crop, that a 13,000,000 bale crop could be easily grown on half the land which it occupied last year, and ought to be grown on one-third of the area. To do this would mean a great saving in labor and the production of the crop for very much less cost and the land set at liberty would produce corn and other feed crops which would make the planters independent of outside help. We hope to see efforts made in this direction this year by the more general seeding of crimson clover in the cotton crop at the last working. Humus in the soil is the first necessity for better results. In our last issue we wrote fully on the preparation and fertilization of the land for the cotton crop, and to that issue refer our readers. We would only add give the land the most complete working so as to secure a perfect seed bed before planting and then plant carefully. Do not bury the seed too deeply and, to ensure this, have the land nicely firmed before commencing to run the planter so that it will keep the drill at an even depth and drop the seed not over one and a half or two inches under the surface level. In this way an even stand can be secured, as the plants will all come easily through the soil. Use a planter that will firm the soil around the seed and thus ensure quick germination and rapid growth. After the plants have gotten the third leaves the sooner the crop is brought to a stand by the chopping out of the surplus plants the better. The plants left will in this way secure the full benefit of the fertility in the soil and get possession of the land. The distance apart to leave the plants must be determined largely by the fertility of the soil and experience in the past. Experiments have fairly demonstrated that on lands of average fertility cotton planted in three-foot rows and spaced to one plant every two feet has almost invariably produced an excess of crop more than sufficient to pay for the greater expense of planting and cultivating in comparison with cotton spaced 4x1½ feet, or 5 x1½ feet, or 6x1 foot. In the subsequent cultivation of the crop follow the lines laid down in this issue for the cultivation of the corn crop.

Tobacco planting should have attention as soon as the plants are large enough to set out. We hear that the plants have made a good growth in the genial weather we have had and that it is probable the planting will be somewhat earlier than usual. There seems to be a determination to make another large crop. We hope this is not going to be overdone. We would urge that it would be wise to be conservative in the matter of planting.

Kentucky, which made a very short crop last year, is this year going to plant largely. This must affect the price even of our different types of tobacco. We would not advise the planting of a larger area than that of last year, but that an effort be made to make what is grown of the highest quality. Fertilize liberally. In our March issue we wrote fully on this question of the fertilizer to use. The tobacco crop, like the cotton crop, ought to be grown on a much smaller area for the quantity produced. Our planters should take a lesson from the Northern producers of the cigar types of tobacco, who use two or three times as much fertilizer per acre as our planters do and that of the highest grade and, as a result, make from 1,200 to 1,500 pounds of tobacco to the acre, where our planters only make from 600 to 800 pounds. Professor Mathewson has shown in his experiments that we can do the same thing here and do it profitably. In this we refer to the dark shipping types of tobacco. The light, bright tobaccos cannot, of course, be grown in this way, as in this type quality is of more importance than quantity, but even in this type there is room for more liberal fertilization with profit. See that the land is well prepared and is in fine planting condition before setting out a plant and watch the opportunity to plant on a good season so that replanting shall not be necessary. After the crop has started to grow cultivate frequently and work around the plants with the hoe so as to ensure that the fine roots may easily permeate the soil and the moisture be conserved.

Peanuts should be planted during this month. In our last issue we wrote fully as to the proper fertilizer to use on this crop and how to increase the yield so that the crop may become a profitable one. We refer readers to that issue. The demand for peanuts grows larger every year, and seems likely to continue to do so, and as the southeastern section of this State seems especially adapted to the crops, and already produces more than one-half of the whole production of this country, we are anxious to see our growers put forth efforts to keep the production largely in their hands in the future. There is money in the crop if properly grown, and the area of land specially adapted to it in this section of Virginia is large. Those who have followed the advice we have given for the past few years on this subject have been able to greatly increase the yield, and especially is this true of several Northern men who have settled here, and have made heavy crops.

The planting of the forage crops, cowpeas, soy beans, sorghum, Kaffir corn and millet should have attention as soon as the time can be spared from the corn, cotton and tobacco crops. Soy beans, especially, should have early attention, as this crop makes a long growing season if to be grown for the seed. We hope to see a much larger area of this crop planted this year than in the past. Every year that it has been grown has more fully demonstrated the value of the crop, both as a feed and grain crop, and that our lands and climate are especially adapted to it. With such a possibility as we have of successfully growing this crop our stock owners ought to grow it

largely. It is the richest protein crop produced, and the man who has plenty of this hay and grain on hand need never worry to buy bran or cotton-seed meal for his stock. It is as easily grown as corn or cowpeas, and is much more certain to make a crop. It suffers less in a drouth and less in a wet season than any crop we know. It should be planted in rows two feet, six inches, or three feet apart, and be dropped in the rows six or eight inches apart. Half a bushel or a little less will plant an acre, and the planting can be done with a corn planter, or with a grain drill, stopping up all the spouts, but the two outside and the center ones. Where the crop has not been grown before, it is well to inoculate the land with some soil from a field where the crop has been grown. The first year of growing, if the land is not inoculated, the crop will not likely be a heavy one, but later crops will be a success. If the land is not in a state of fair fertility apply 250 pounds of acid phosphate per acre broadcast, and work in before planting the seed. Do not plant deep, two or three inches is deep enough, and the soil should be loose and open to admit of the plants coming through easily. In experiments made in Tennessee the yield of grain for each of the three leading varieties, Mammoth Yellow, Medium Yellow and Ito San, was highest where the rows were one and a half feet apart. In 1908 the eight-inch drill rows gave the highest yield of hay, which was also the finest stemmed, and hence, most desirable for feeding. In 1907 the Mammoth Yellow produced twenty-eight bushels per acre, the Medium Yellow, twenty bushels per acre, and Ito San, twenty bushels per acre. These yields were made in Tennessee from early June planting. Cowpeas should not be planted until the land is warm, as they are very apt to rot in cold land. May is early enough to commence to plant, and June is a still better month. The New Era is an excellent variety for making peas. The Clay, Whip-poor-will and Red Ripper are better for vines. For a grazing crop the Black, or a mixture of two or three varieties is the best. Drilling in rows is preferable to sowing broadcast both for seed, and hay, and half the seed can in this way be saved, which it is usual to sow, when, put in broadcast. Half a bushel drilled will make a better crop than a bushel sowed broadcast. We will deal with sorghum and the other forage crops in our June issue, as that will be in plenty of time for planting then.

NOTES ON THE APRIL ISSUE.

Editor Southern Planter:

In regard to the need of potash in Tidewater, I think the editor forgets that I said that along streams coming from the Blue Ridge there may be an exception, but that the sandy lands in general in the Tidewater section are not deficient in potash I think is a mistake. Dr. Stubbs has doubtless found plenty in Gloucester, and found plenty in the lower Gulf States, but in all the South Atlantic coast country there is a real need for potash. The Virginia streams having their head in the Blue Ridge do bring to their lowlands an abundance of potash, but a very different state of affairs will be found along such streams as the Chickahominy, and such other Tidewater

streams as do not come from the mountains where potash bearing rocks are abundant.

Diamond Joe Corn.

I do not know anything about this variety of which Mr. Heiges writes, but, as a rule, I do not think we need to look after especial earliness in corn. In fact, I have always found that the heaviest crops are to be had from late varieties. The only value of an early corn here is for replanting a later variety so that the pollination may come together. But, as a rule, I have quit replanting altogether, for the replanted corn is hardly ever worth the trouble, as the pollination is over when it comes in and little corn is made. Better use seed enough to insure a stand.

Inoculation.

So far as my experiments go, I would not use the artificial cultures for inoculation, and I have never seen any good results from the inoculated seed of legumes sold on the market. Soil from a field that is already inoculated is the best means for transferring the bacteria. The examples Mr. Fred shows indicate that the beans had already inoculated the soil. The same has been observed in the cowpea. A farmer in Northern Ohio wrote to me that he sowed cowpeas there and they made a very poor growth, but sowing the same land the next season gave him a splendid crop as the plants had gotten inoculated from the first season's crop. The same was observed in the lower Mississippi valley in Louisiana. The first season crimson clover was sown it made an entire failure, but the next season the same land made a fine crop. But, with most legumes, the inoculation can be secured at once with inoculated soil. The artificial cultures, if used fresh and the seed at once sown, will doubtless have a good effect, but, if kept long or the seed kept some time after treatment, there will be but poor results, and I would not give a penny more for the inoculated seed sold by seedsmen than for the uninoculated seed.

Building Up a Run-Down Farm in Virginia.

Sometimes I am inclined to despair of the Southern farmer. Recently I rode down to Florida and back by another route, and all the way I saw the whole country bedded, as usual, for cotton, and not a green field in sight, and, I thought, what is the use of trying to persuade the Southern farmer to farm? But now and then I get letters from those who have tried and succeeded in restoring a run-down farm, and it is the men like "Subscriber," on page 354, who put more courage into one, and enable us to see that the labor has not been entirely in vain. And every one like this subscriber who succeeds becomes a nucleus in his neighborhood for better farming, and now, on the eve of my three score and ten years, I can feel that my work has not been altogether in vain, and that I have helped a few at least in dear old Virginia.

But did you ever notice that the value of *The Planter* is due to the intelligent farmers who help us make it? I do not think that any paper in the country has a more intelligent class of contributors, men now on the farms, than the *Southern Planter*, which has not abandoned the methods of the old, dignified days when the best men in Virginia contributed to its pages in the days of Ruffin. We have learned many things from scientific investiga-

tion, but, so far as successful farming is concerned, do we know much more to-day than the educated farmers of Virginia did "befo' de Wah?" Farms once cultivated are scratched in patches by negro tenants, and the land and the negro both depreciating.

Crimson Clover.

Said a friend to me sometime ago: "You have made this section with cowpeas and crimson clover." Hardly a last-year corn field can now be seen that is not green with crimson clover sown as Mr. Tyler says. Some used a peck of seed, and the whole land is densely covered. Others used less seed and the ground is patchy. My neighbors in Albemarle used to laugh at me for sowing a peck of red clover seed, but when the hay was cut I always had enough more than they had to pay for ten times as much difference in the seeding. Here in this sandy, pine woods section peas and crimson clover and the manure bought from the North by the truckers have wrought a great change, for now the sandy soil sods over with blue grass when left out, and that where it was once thought that grass would not grow. My dwelling stands on the crest of a hill falling off to the river in the rear. That hill I remember as a bare sand hill. But to-day there is on it a blue grass sod that Kentucky cannot surpass. Simply manure and lime.

Cocke's Prolific Corn.

Mr. Wood's crop of 156 bushels of corn per acre reminds me of a remark made by the Director of an Institute, in which I was lecturing, and in which I spoke of the value of Cocke's Prolific Corn. "Yes," said he, "I made more corn with that variety than any I had, but it makes too many years to shuck." I never before heard a man object to a corn making too much corn. At an Institute the past winter in Maryland I gave my preference for a prolific corn, or one that makes more than one ear per plant. The Director called on a corn breeder present and asked him if he did not prefer a variety that made one big ear to the stalk rather than one that made more ears of smaller size. He replied that he did. Of course he did, because he was breeding corn for the corn shows, where only big ears get any notice. And he has as good land as that on which Mr. Wood made 156 bushels, and with the big score card ears he makes about seventy bushels per acre.

Plowing.

The objection that Mr. Weissinger makes to the disc plow is no objection if the land is plowed right. Of course, if the field is plowed around from the outside, there will be the result he mentions of earth thrown to the outside and a ditch in the middle. But if the plowing starts as it should from the middle and finishes on the outside, there will be no such result.

Southampton Land.

I agree with Mr. McCoy that land like the most of that in Southampton will not be benefitted by subsoiling, but he is also right in using a No. 40 plow and going eight inches deep. If he will get Mr. Grizzard to do likewise I think we will hear less of the importance of ridging corn and cutting off its feeding roots. There is a productive farm in all that section right under where the scratch of the little plow went on the poorest land.

Oregon Apples.

I keep tasting those superb apples from Hood River. They are beautiful specimens of apple culture and packing and skillful advertising, but I would rather have half a dozen Albemarle pippins from the Ragged Mountains than a whole box of the Hood River beauties. They taste more like turnips than apples.

Southern Truck.

It was odd to see on a Southern trip that the cold snap January 31st was more severe far South than in North Carolina or Virginia. They told me at Savannah that the mercury fell there to eighteen above zero, while at New Berne, N. C., it was twenty-nine, and here in Southern Maryland, on the Eastern Shore, it was twenty-one, the lowest of the winter.

In Savannah the big Oleander clumps had all the leaves burned off, while at New Berne, N. C., I saw them perfectly green. The cabbages were badly hurt there, and at Young's Island, S. C., but not at all at New Berne and Norfolk. Some were running to seed, but, as one grower said, it would be a good thing at Norfolk if half the crop ran to seed, for "Norfolk county always kills Norfolk county," he said, "by having too much stuff rushed on the market at the same time."

Hogs.

For the general farmer, I think that Mr. Cook is right in liking the Berkshire hog. But the scrub will not disappear so long as there is a demand for Smithfield hams, for there is no doubt that the woods ranger makes finer bacon than the lard hog. But, for the genuine razor-back, go to Florida. I saw there many that looked as though they should have a weight tied to their tails to balance the snout and head. But go to a fancy grocery store in Philadelphia and ask for Virginia hams, and they will ask you forty cents a pound, while the packers' hams of Berkshires and Poland Chinas can be had for sixteen or eighteen cents. And there is more money to the general farmer in the lower priced meat made from hogs that mature early, and a Berkshire is a far better looking animal to have around. But the razor-back is the survival of the fittest for the conditions in which he exists. I saw them rooting down with their big subsoilers among the saw palmettos till you could only see a long tail wiggling above. A Berkshire would starve under the same conditions. But when the Palmetto berries ripen the razor-back gets fat and gamy, and makes the finest of bacon.

The Farmer.

In the last week's issue of the Outlook, the paper on which Mr. Roosevelt is to be an associate editor, there was quite a symposium on the farmer. The various writers seem to think that farming and the farmers in this country are going to the "demnition bow wows." As one said, "We are a manufacturing people and the manufacturer will always make more than the farmer." But all seem to overlook the fact that if the farmer fails the whole fabric of manufacturing must tumble. Agriculture is the foundation of all national prosperity, and without a prosperous farming community there can be no successful manufacturing. New England let her farms go to waste and devoted herself to manufacturing, but could she have done this and lived had it not been for the farms of the West? Among the hundreds of millions appropriated by

the general government agriculture, the foundation stone, gets about twelve millions, while the government of the little District of Columbia has ten millions.

Turkey Buzzards.

I think that instead of protecting buzzards there should be a premium offered for their destruction, for there is no greater agency in the scattering of hog cholera. What have they done with the little breed of buzzards that formerly swarmed in Charleston? Two weeks ago I was there and did not see a buzzard on the streets. The Harleston buzzards seem to be a smaller breed than our Virginia rascals.

W. F. MASSEY.

IS MURIATE OF POTASH INJURIOUS TO TOBACCO AND POTATOES?

Editor Southern Planter:

The Legislature of Virginia did a great service for the farmers when, a few years since, it passed the law providing for free analysis of fertilizers by the State Chemist. I could only wish it had gone a little further and provided for a more complete analysis, showing not only how much ammonia, phosphoric acid and potash a fertilizer contains, but also the sources from which these ingredients are derived. Between five and six million dollars are spent in fertilizers in Virginia annually, and Dr. Magruder in his very excellent address, at the Farmers' Institute last year, asked the question, "Do you farmers spend this enormous sum of five or six million dollars judiciously?" I answer, we do not; we do not know how. There are some fifteen hundred brands of fertilizers on the Virginia market bearing the same guaranteed analysis. But this does not mean that they are the same fertilizers by any means (they are the same to the farmer, of course; he cannot tell the difference). They are compounded from various sources, such as chemicals, minerals, blood and bone, fish and decomposed matter of every sort, and, although the same guarantee, some are infinitely superior on account of the superior sources from which they are made; some suited to the growth of some plants, and highly injurious to others. How can the farmer know, and how can he spend his money in fertilizers judiciously? Now this leads to the question, "Is Muriate of Potash Injurious to Tobacco and Potatoes?" Most farmers are of the opinion that it is to tobacco, and some think it is injurious to the potato. Whether these opinions are founded on theory or practice I do not know. Mr. Charles W. Priddy, President of the Hampton Guano Company, in a letter to our Farmers' Club, says, "There is little, if any difference in the action of the different forms of potash on any crops," and that any up-to-date agricultural chemist would bear him out in this statement. Now, I am not prepared to controvert this—it may be so—but why this almost universal belief amongst farmers to the contrary, and why do such eminent agricultural writers as Professor Mathewson and Mr. H. Winkelman specify sulphate of potash in their tobacco formulæ? This is written for the purpose of inquiry, and any light on the subject from a scientific or practical standpoint would aid the farmer in the selection of a fertilizer, and save his being duped by unreliable manufacturers.

M. L. WATSON.

Ncttaway Co., Va.

Up to within the last two or three years it has been generally the opinion that potash in any other form than the sulphate had a detrimental effect on the quality of the Irish potato, tending to make it sad or heavy instead of mealy or light when boiled. Numerous experiments have been made to test the truth of this and the conclusions reached are that there is no foundation for this opinion. The muriate gives just as good potatoes as the sulphate and is much cheaper. The kainit form of potash is the least desirable of all, as it is so heavily impregnated with chlorides. It is, however, useful to use on cotton, as it tends to prevent rusting. For tobacco growing, the sulphate only should be used. All other forms injure the burning quality of the tobacco; hence, tobacco experts always advise this form.

It is much to be desired in the interest of farmers that fertilizer manufacturers should be required to state the source from whence the nitrogen, phosphoric acid and potash in their fertilizers is derived, as without this knowledge they cannot be used with discrimination and profitable results.—Ed.

THE CORN CROP.

Editor Southern Planter:

The first step in the successful growing of corn is the selection of good seed. A very good way to do this is to have a box on the hind end of the wagon and as good ears from healthy stalks are found while gathering, these are thrown in this box instead of into the wagon. Only good ears, well filled out on the butt and tips, should be selected from good, healthy stalks. It is possible to increase the yield of corn five to ten bushels per acre in this way. The writer has seen instances where the average yield of whole counties has been increased five bushels per acre over counties where careful selection is not common.

One should next consider the care of seed corn. The vitality is very likely to be injured if it be exposed to the weather where it may freeze and thaw, and more especially where it is not dried thoroughly. Therefore, if one is not prepared otherwise it is well to dry corn in smoke house or garret and leave it there during the winter. If corn is carefully selected and dried and kept dry there will not be much difficulty about vitality in spring. On the other hand, it is well, if seed corn is selected from crib, to always test the growing power by planting a few grains in a moist box of sand and keeping in a warm room. If over three-fourths do not sprout in a few days it certainly will not sprout in the field and measures should be taken accordingly to plant more corn to the acre if no better seed can be secured. It is not advisable either to purchase seed corn from an entirely different climate.

Having selected the seed, the next thing to be considered is the preparation of the soil. Corn land should ordinarily be plowed deep—eight to ten inches. Heavy loamy lands may be fall plowed and left exposed to winter's freezing and thawing, if not too rolling. There is danger of hilly land washing if left exposed. Sandy lands should never be plowed in the fall. The corn crop will stand heavy manuring and therefore one may, without danger, turn under heavy crops of clover, cowpeas or a heavy

dressing of manure, if time be allowed for it to rot before the crop is planted. Corn differs from wheat in that there is little danger of causing an over-production of stalk by heavy manuring, but wheat, when heavily manured with nitrogen, may lodge badly. Other fertilizer may be used for corn, as bone meal and potash, but well rotted farm manure is probably the best fertilizer, as the biggest growth takes place during a season of most rapid nitrification. Sandy lands especially should be heavily manured.

On fall plowed land the best implement to use in the spring is the disc harrow, weighted so as to cut deep, and this may be followed by the tooth harrow or drag, and a roller may be very conveniently used if land is cloddy. Spring plowed lands very frequently become hard and cloddy, if allowed to become dry after plowing and before harrowing, and in many cases it is a very good plan to harrow it at once and not allow the soil to become dry. This is especially true on some of the very best corn soils of Illinois. The spring tooth harrow is often very useful on hard clods combined with the roller, as the harrow will bring them to the surface where they may be crushed by the roller.

Corn in the corn belt is usually planted in rows or checks three and one-half or three and two-thirds feet apart, experience having proven this to be the best distance, and with a planter planting two rows at once. But in many places outside the corn belt, and especially where the land is rather poor, it is often drilled in rows five feet apart. Here ten bushels per acre is a very good yield. Even on fairly good land corn is often planted with a one-horse implement a greater distance apart than is necessary, thereby decreasing the yield of grain. Outside the recognized corn belt, the need of improved methods in corn growing is very marked.

Ordinarily corn is given level cultivation and, under ordinary circumstances, this is best, but there are exceptional cases where another method would be more satisfactory. It is very often the case in the cotton States that the corn land is seen ridged. Frequently the corn is planted on ridges. This is usually the way cotton is planted and, from force of habit, corn is planted this way also. In other cases the dirt is thrown around the hill. Sometimes this is very satisfactory, the furrows between the corn serving to permit the water to pass off and, by exposing a much greater surface to evaporation, fifteen to twenty per cent. more moisture is given off to the atmosphere. But this method of cultivation is frequently practiced on lands where it is necessary to make every effort to save moisture. In such cases level culture is much more satisfactory. I have seen the soil thrown up in ridges along the corn so as to expose by actual measurement nineteen per cent. more space to evaporation than it would have were it given level culture. Now, as it requires approximately three hundred pounds of water to make one pound of corn plant, and nearly twice that to make one pound of grain, it is evident that the saving of moisture is a matter of considerable importance. Corn land should never be ridged unless it is inclined to be wet, and is level, but in a wet season on ordinarily well drained land it may be advantageous to do so in order to get rid of surplus water. Sandy land, unless very level

and wet, should not be ridged for corn, but cold, heavy clays may be with good results. A great deal depends upon the soil and it does not necessarily follow that any method which is successful over one man's land would be the best for some one else's.

After planting, corn land may be advantageously harrowed with a light harrow or weeder. The proper treatment for corn just planted depends upon the soil and upon the season. If there is sufficient moisture to properly sprout the plants, and the land is not weedy, and the soil has previously been well prepared, it is not necessary to do anything until the plants are well above the ground. But if the ground be somewhat dry, and the soil is loamy and full of organic matter, and there is a good store of moisture in the subsoil, rolling will prove advantageous, as this will, by compacting the surface, establish capillary connection between soil and subsoil, and bring moisture to the plants. As soon as possible this should be followed by a light harrow or weeder, to prepare a surface mulch. It will do no good to roll a very sandy soil, and it should always be remembered that this method of getting the moisture about the seeds is always accompanied by a loss in moisture for the whole field. When the land is prepared in ridges the roller, of course, cannot be used.

On rolling land it is a good plan to let rows of corn run around the hill, and well to ridge them somewhat to prevent injury from washing. They should never be ridged and run down hill, as this is just the way to cause the greatest damage by washing.

Cultivation proper of corn may commence as soon as it is two or three inches high. In the corn belt cultivators are generally used, and care must be taken not to cover up corn. Early cultivation may be deep, from four to six inches because as yet the roots of corn have not spread out between the rows. It is well to make subsequent cultivation shallow, as the roots of the corn plant soon reach between the rows and intermingle so that great damage may be done, if the land be stirred deeply. Everything considered, the best implement for cultivating the corn plant is the spring tooth cultivator with four to six shovels on a side. This will stir the ground as deeply as is necessary for the first cultivation, and will easily run as shallow as is desired for the last one. On rather light soils an implement similar to sugar-beet cultivators, which merely shave the surface of the ground, have been very successfully used.

Two results are gained by the cultivation of corn. First, the destruction of weeds; and, second, the conserving of soil moisture. The first is perhaps the more important. A large growth of weeds will materially cut down the yield of corn, not to mention the trouble it may cause in seeding other crops. But the second is also very important. Normally, on well drained lands, it should be the aim at every stage of operations to prevent evaporation from the surface of the soil. The only practical way to do this on a large scale, is to maintain the surface one and one-half or two inches stirred or mulched to prevent capillary connection from being established with the subsoil. This will keep moisture from below from coming to the surface and being dissipated by evaporation. This is one reason why it is

always well to harrow ground as soon as possible after plowing. The most effective mulch is one and one-half or two inches deep (various Experiment Stations support this statement). To do the greatest possible good, the ground should be stirred once a week at the farthest, and after every rain, so as to keep the moisture within the ground for the use of plants. But when handling large fields this cannot be done, and this is one reason why small farmers are often more successful than larger ones, as on a smaller acreage one man can attend to this work when it is needed.

When the season is wet, corn should be cultivated as often as possible to keep down weeds and to prevent a hard crust forming on the surface. Cultivation may be continued as long as desired. There is no danger of doing too much work on corn provided it is done carefully. Of course, there is a limit to what may be done at a profit, this depending upon circumstances. If the season is dry, cultivation may well be continued after corn is too large to use the cultivator. There are various one-horse implements on the markets which accomplish this purpose.

Farmers in the middle west will no doubt be interested to know that a one-horse five-hand cultivator is frequently used in New York and other Eastern States to cultivate checked corn diagonally; that is to say, the corn is cultivated in three directions. These say it can be kept much cleaner in this way.

This careful cultivation may be contrasted with a little "nigger" and a mule, and a double shovel or cotton sweep, which is seen in other sections.

CHARLES W. ELY.

Appomattox Co., Va.

ALFALFA GROWING.

Editor Southern Planter:

In a recent issue of the Southern Planter I noticed an article from our esteemed friend, Prof. W. F. Massey, on the behavior of certain fields of alfalfa in North Carolina. These fields, it may be remembered, were upon granite soils which had grown alfalfa luxuriantly for many years. No lime had ever been applied to these fields, so Professor Massey thinks. When one of the fields failed to yield profitably it was plowed and limed and resown to alfalfa, but instead of being helped by the liming, a complete failure was the result, whereupon Professor Massey reads the lesson that liming of alfalfa may often be unnecessary, and in some instances positively injurious.

I cannot call in question the accuracy of our friend's statements, or the closeness of his observation, yet it is astonishing to find such results so directly contrary to what we have observed in a close study of the alfalfa plant, running over many years, and carried on in almost every State in the Union, besides several foreign countries. Frankly, I have no opinion as to the cause of the failure that Professor Massey records. It may have been due, of course, to the depletion of the soil in phosphorous, or potash, or to one of a hundred other causes that sometimes make alfalfa a failure, but I cannot believe that the liming of the soil had any bad result. I would not burden the columns of the Planter with this letter were it not for the fact that I fear that many of Professor

Massey's loyal readers will hail with gladness his suggestion that it is very doubtful whether lime is a benefit in alfalfa culture. Let me here say that this is the only instance that has come to our observation where lime has not been a direct and almost an immediate benefit to alfalfa growing. Our office (we now sell seed and employ several lady stenographers), is in constant receipt of letters relating experiences in growing alfalfa over many States, and several foreign countries, and thousands of these letters speak of the benefit that has been derived from the use of lime, and it is very notable that our larger orders for alfalfa seed are from regions having large percentages of carbonate of lime already in the soil.

Recently my brother Joseph visited a large plantation in Louisiana where he is adviser, and where alfalfa is growing as luxuriantly as any he ever saw in his life. In this particular soil an alluvial deposit from the Mississippi river which has more than one per cent. of carbonate of lime, is everywhere present. This would amount to more than 100 tons of carbonate of lime per acre in the top five feet of soil, and this is probably about the depth to which alfalfa roots reach. Although alfalfa is thriving so admirably upon this plantation, the manager having read of the benefits of lime, and having a carload of it on hand, decided to test the use of more lime, and thereupon proceeded to spread, I know not how much, but probably four or five tons per acre of air-slaked lime upon this field. No apparent results have followed this application, but Joseph states that where the lime was carelessly applied so that it lay two inches deep over the field in spots, the alfalfa came through it just as vigorous and beautiful as elsewhere, which shows that even large and useless applications do no harm.

Certainly if the teaching of the lime requirement of alfalfa led to neglect in applying potash, phosphorous or humus, or inoculation, the teaching would be misleading, and perhaps mischievous, but while all these things are useful, and even necessary, yet we must be permitted to continue to insist that a good proportion of carbonate of lime in the soil is the very first and most pressingly needed requirement, and, in fact, we have abundant evidence that where soils are well drained and filled with lime they will grow alfalfa almost spontaneously, and keep it in perfect health and thrift, even though it may not make large yield. If one will add to this lime the other elements needed to make complete plant food, he will have beautiful alfalfa fields, beyond doubt, anywhere between Key West and Quebec.

In this connection, I wish to emphasize the importance of the profit accruing from liberal feeding of alfalfa fields. I have just returned from a walk over a sixty-acre meadow, sown last year, and to which we applied a liberal application of phosphorous, and which in years past had been well manured, so that the land is quite well stored with humus. This spring we again went over the field with two fertilizer distributors, one of them sowing a strip eight feet wide, and holding 1,500 pounds of fertilizer. With these machines we distributed about 300 pounds per acre of high grade acid phosphate. It is to-day (April 14th) a beautiful sight to see. There is hardly a square foot of the sixty-acre field not green,

and the plants so thick and lusty that they crowd each other, giving us promise of 250 tons of hay this year, and perhaps much more. This field, by the way, was almost an abandoned field about eight years ago, when we bought it, and its reclamation has been accomplished chiefly through the effect of the alfalfa grown upon other parts of the farm, fed to sheep and the manure put there. Now, the tables are turned, and this field will take up its task of sending out fertility to refresh other parts of the farm.

I would not minimize the value of Professor Massey's work for the Southern farmer. Probably no other man has done so much good, and doubtless he has the most devoted following of any man living to-day. This very fact makes it the more dangerous when one might perhaps misunderstand his words, and draw from them a lesson so far from what we feel to be true, as this is on lime for alfalfa growing.

WILLIS O. WING.

Mechanicsburg, O.

AN OLD FARMER'S EXPERIENCES.

Editor Southern Planter:

If you will allow, and can make readable sense of a scattering load of an old farmer's thoughts and ideas, permit me a few words on some of the topics now under discussion.

After reading your instructive editorial comment and advice, and the replies to the various questions put to you, your head must be level on farm work. Then your scientific professors of agriculture are all good in their intent, but many times their advice and methods are rather extravagant and high strung for the ordinary farmers. Horse sense and experience should never be lost sight of. Hold to these and get all the extras that are possible.

I notice that there are quite a variety of opinions as to the best turning plow, much of which is fancy I think, and perhaps some from interested motives other than true merit. Almost any plow of which I have knowledge will do on sandy loose soil, but my experience and observation is that the fellow holding the handles has lots to do with any plow's good qualities. Give me a live man or boy who takes a pride in doing his work well, and with this and the No. 40 Oliver chill for all soils and conditions, surpasses any plow I have ever tackled yet, and I have tried many.

Grape Vines.

I would like for "Mr. Newcomer," when he gets his grape vines planted to try my plan of cultivating on a few vines. Mulch instead of plow or hoe; keep weeds and grass down with a blade. I have a few vines thirty years old, bearing every year healthy and well. Two good sized vineyards nearby were planted the same year that mine was, and continuously cultivated; not a sprig of grass allowed to grow, several times planted to peas and other crops. Both of these vineyards died out fifteen or twenty years ago, and grape growing was given up as no good by the owners. My idea is we should study nature and assist it all we can, and this is why I mulch instead of plow or hoe the roots to pieces, and bleed them to death. A few tobacco stalks around the base of the vine in win-

ter, and rotted leaves and rich woods earth is all the working mine ever get, except pruning and training, and cutting out noxious weeds.

Broom Straw.

Our brother in Henrico speaks of broom straw land bringing corn after lying in this straw for several years. I don't think this (grass) or straw a sure test of poor land in Virginia by any means, for it will grow anywhere, furnish and sow its own seed, and never fail, wet or dry, to make a full crop. All it wants is a little time to whip out the best of our meadows. It is a curse to our Virginia freestone lands, and an eye-sore. I never try to turn it under after it matures, but put a match to it as soon as practical, and burn it off clean. The ashes may do some good, but don't think the dry straw turned under advisable.

Corn Fertilizers.

Hen manure and wood ashes mixed as a corn fertilizer, or for anything else alone, are no good, is my experience; one kills the other. Try it this way, under a good shelter, spread a few inches of rich woods earth, then a layer of hen manure; cover this with more earth, then your ashes and some salt, say, a peck of salt to every six bushels of the other ingredients. Keep this up until you exhaust the hen manure and ashes. Just before wanting to use this fertilizer for corn or tobacco, shovel and fork it thoroughly together; pound and mash all lumps; if you wish, pass it through a coarse sieve. It will beat any of your \$20.00 and \$25.00 per ton fertilizer, is my experience, and it costs but little time or money. Use a light handful to the hill, or you may drill it if preferred.

C. P. H.

Bedford Co., Va.

WHAT IS PLANT FOOD?

Editor Southern Planter:

Seeing so much about keeping our lands in a productive state, I will through your most valuable journal give my ideas. In what consists the productiveness of land, how best can we maintain it? In considering these subjects, there are several things so manifest that we will term them axioms. In the first place, whatever is grown on a piece of land represents so much of the producing power of the land. Another is that, nothing applied on our lands is lost, unless the soil itself is removed. I remember well that in slavery times when a piece of Virginia land was put under cultivation, no plows or drags were used. The growth above ground was removed, a large percentage of it was burnt on the land, then with strong hoes the land was hilled up, in mid-winter, all the fine roots, etc., were left in the soil to rot, and in the latter part of May and first of June it was in fine fix, when it was chopped off and planted to tobacco, without any manure, always making the best tobacco. Tobacco succeeded tobacco for five or six years, according to the original fertility of the soil. I have known seven crops grown on the same piece of land, the last one a good one. We had no commercial fertilizers then (so-called). We had Peruvian guano; which was close around \$100 per ton, but it was strong, and not much used. This continuous cropping rapidly took away the producing power of the land, the heavy lands becoming a red hill and

light gray lands a barren white or sandy waste. But wherever a reasonable degree of restoring to the land plant forming material was followed, the land was kept in a fine producing state, much of it becoming richer every year. I know of one old gentleman, whose lots under this system became so rich he could not grow good tobacco on them, and had to crop them in wheat to reduce them some, and by the way, the wheat they grew then was fine, had an oily appearance, and always weighed over sixty pounds to the bushel. I have a lot I am looking at as I write, which has been cropped continuously for more than thirty years, which produces over three times as much now as it did when I took it up, a piece of waste land, on account of its location, and the lay of the land. I plant it to tobacco, giving it a good coat of stable, or barn-yard manure, and apply 400 or 500 pounds of so-called commercial fertilizers (I am now using German clover on the same lot), following with wheat. Last year, the tobacco from this lot weighed a pound to three plants. It could have been made to weigh a pound to each plant, for I have had one plant to weigh eighteen ounces in the same field. These are no experiments, but just annual efforts to make a living on a Mecklenburg farm, by putting something and more back in place of what I take from the soil, in the shape of plant forming material.

As to the second axiom some may not so readily agree; but when you think about it, it is equally apparent. Some years ago I was talking with a learned professor from West Virginia, and stated that the soil lost none of its fertility by leaching, he at once remarked that that was contrary to agricultural teachings. I said I knew it, but asked him if he did not live in the mountainous section. He said he did. I asked him if the soil was the same from base to summit. He said it was, hence he had to agree to the proposition. I know when soil is washed away, the fertility is gone; but ordinarily, water leaching through the soil leaves all of its manuring properties, and soon comes out sparkling and bright, fit for the beverage of a king. If this were not so this world would have been uninhabitable thousands of years ago, all of its fertility would have been leached out in the bottom of the sea, and we would be upon a barren waste, instead of this beautiful green earth, which becomes greener and richer the more this so-called leaching process goes on. Wherever the precipitation is greatest, the earth is the richest. No doubt everyone can recall some high point where this leaching has been going on for years with no diminishing of fertility. I have a knowl- in my low grounds, where fodder used to be stacked more than thirty years ago, all around it is poor land, but that spot is very rich, on account of decayed vegetable matter, which was there for so long a time, with its continual reproduction of plant life, and its annual decay. A few years ago, if one asked what to put on a piece of land to make a certain crop, all agricultural journals would say so much phosphoric acid and ammonia and potash, and some of them do now; but on account of the overwhelming testimony of successful farmers that those things are not to be depended upon, it is agreed that humus must be restored to the soil, but the cry is a belated one, for our lands are becoming ruined by the reckless use of

ammonia, phosphorous, potash, etc. There is practically no effort to save barnyard manure to replace the plant food taken from the land, hence our lands are becoming so poor some crops are abandoned. There are six or seven farms contiguous to mine, where wheat is not sown, upon which a few years ago, fine crops used to grow, ranging from sixteen to thirty bushels per acre. Now, they say the land is too poor to bring wheat. One, especially, which always made sixteen to eighteen bushels per acre, in the old man's time, who is now gone. The owner, a tobacco specialist, buys the so-called concentrates, corn, etc. and feeds to his stock, pays very little attention to his barnyard, has very few loads of manure to haul out, which he drills under his tobacco. The same land makes only four or five bushels per acre, and so it goes where there is not a return to the land in bulk and weight of as much as was taken from it. I remember a good experiment noted in *The Planter* a year or so ago, when boxes with different kinds of soil were used and treated with phosphoric acid, ammonia and potash, the one containing check soil, with an abundance of the so-called plant food, made practically no growth, the experimenter stating that under certain conditions plants would not grow when there was an abundance of well balanced plant food. He failed entirely of seeing the result of the test. It plainly demonstrated that said ingredients are not plant food at all, for no plant will fail to grow under favorable conditions when there is plenty of plant food available. Indeed, those three ingredients in a very small way, enter into plant fibre. A very prominent fertilizer manufacturer in your city puts no ammonia in some of his goods for tobacco. The farmer from Loudoun, I think it was, who used his barnyard manure was right. To build up your land you have got to put something on it. This is getting too long, so will close. I don't wish it to be understood that I am opposed to using commercial fertilizers, for I use them every year, but the point is not to depend upon them to build up your land, for they only act as a stimulant to enable you to get what fertility is already in your land, and their use without supplying the actual plant food will quickly impoverish the richest land. Twenty years ago this was the theory held by guano manufacturers, but enthusiasts seeing the magical effects of these goods on plant production, soon dubbed them, well balanced plant foods, and, of course, the manufacturers quickly took the hint. I may at some future time notice Prof. Massey's fling at the Eastern Shore truckers and legumes.

THOMAS A. ORGAIN.

Mecklenburg Co., Va.

THE PLOW QUESTION.

Editor Southern Planter:

I have read with a great deal of interest the articles in your paper on plows and plowing, a subject on which every farmer should be well informed, as we all know that a well plowed field is the first requisite for a good yield of any crop that is put in. The disc plow is a late innovation, and a great many farmers were carried away with it at the start, but after a short time awoke to the fact that it was not a general purpose plow, and many laid them in the fence corner. I have had consid-

erable experience with disc plows, and most of the farmers in our section (Middle Tennessee) have had the same trouble. Heavy draught and the corrugation of the bottom of the furrows are some of the complaints made against the disc, and the end or side draught causes friction on the bearings which soon wears them out. I have never used one of the reversible discs, although I think they would make an excellent hillside plow, but on level land, I am confident, we would have the same difficulty as with the larger and heavier discs. I have no doubt the reversible has some excellent features, but think they can also be found in the level land plow.

I believe that a plow on the model of the Vulcan and Oliver is the best all-round chilled plow that the farmers in our section can use. "Plow deep, and turn the land completely over," has always been my motto, as thereby you increase the depth of your soil, and it takes deep soil to stand the drought, and this will also take care of the water in the rainy season. Now, while the above chilled plows have their good qualities, they have their weak ones also. The chilled plow is expensive to a great many farmers, owing to its extreme liability to break, and it is the time lost that hurts the farmers when they break down. What we need is a stronger chilled plow, and from what I have seen of the work done by a new plow known as the Wm. J. Oliver Improved Chilled Plow, and manufactured in Knoxville, Tenn., by the Wm. J. Oliver Manufacturing Company, I am lead to believe that the manufacturers have supplied a long felt want with farmers, by giving them a plow that will stand up under any strain put upon it, and turn everything under when it starts down the furrow.

Now, my advice to all is to get a good strong chilled plow and plow deep. Plow a little deeper the next year, and subsoil every three or four years; put something back on your land, and, take my word for it, our descendants will have a better opportunity of making a living than we had to begin with. And, as we are only stewards of the Great Giver of all things, we should leave our farms more productive for coming generations, who will have more need for them than we did when we took up our stewardship.

J. R. ROSSETTER.

Clarksville, Tenn.

CASH VALUE OF MANURE.

Professor Voorhees says:

"A farmer should realize that a well fed dairy cow will, on the average, produce 12 3-4 tons of manure per year, and that this product will contain on the average 117 pounds of nitrogen, 77 pounds of phosphoric acid, 89 pounds of potash, enough, if all the constituents in it are used, to grow nearly 70 bushels of wheat with the accompanying straw. These have come from the farm somewhere; if they are not returned the power of the soil is lessened.

"If the farmer wishes to return these in the form of commercial fertilizers, he would have to pay out \$30.00 at present prices—20 cents per pound for the nitrogen, and 4 1-2 cents each for the phosphoric acid and potash."

The real cash value of manure is not given proper consideration by most farmers.

Prof. Hopkins of the Illinois Experiment Station, says: At ordinary commercial prices, the nitrogen contained in the air above each acre is worth more than ten million dollars. By means of bacteria which live on their roots, clover and other legumes have power to draw on this unlimited supply of free nitrogen."

EXPERIMENTS WITH COCKE'S PROLIFIC CORN.

Mr. H. E. Wood writes us that in our report on his experiments with Cocke's Prolific Corn, reported in the last issue, several errors occurred, which he desires to have corrected. On Plot No. 2, every two rows made a barrel of corn, instead of each row making a barrel, as stated. Plot No. 3 contained only 56 square yards less than an acre. The yield of 183 and a fraction bushels of corn per acre made by Mr. Wood some years ago, was made on his Rivanna river farm, in the same county, and not on the Bremo farm, as stated.

CROP YIELDS.

We are often asked what is the best crop to grow, or what is the yield per acre of certain crops? There are averages galore. There are high markers and low markers in agriculture as in everything else. There are men who won't plow until it gets warm, who are invariably a little bit too late for the fair and get bottom prices in consequence. However, as no man has yet been able to secure the greatest possible yield of any acre of any crop, we give the following items gathered here and there on Long Island, showing what some men did in 1908.

Asparagus.—7,200 pounds yielded \$800. This was "Palmetto," which many years of careful test have shown runs thirty per cent. over other varieties. One grower's carefully kept books show a net return for over ten years' running above \$550 per acre annually.

Onions.—One man raised 1,108 bushels to the acre; another 930; still another Long Island raiser, 600 bushels to the acre, but on the self same acre, between the onions, he raised 1,300 bushels of carrots.

Potatoes.—In spite of the drought, many men produced over 260 bushels to the acre, for which they received eighty and ninety cents a bushel. Cost twenty-three cents per bushel, net per acre, \$161.20. The usual yield per acre is between 300 and 350 bushels. Another raiser, who chose early potatoes (instead of the usual late crop) produced 230 bushels, which were sold at from \$3.00 to \$3.50 per bushel.

Cauliflower.—Late crops run close to \$200 an acre, earlier crops raised by those who use crude forms of irrigation, over \$400 per acre.

Cabbage.—Twenty tons to the acre, which is a low figure for this crop, sold for from \$10.00 to \$20.00 per ton, one grower netting over \$300 per acre.

Brussels Sprouts.—Number of plants of one grower to the acre, 5,800, cost of growing \$30.00 per acre. Careful returns kept from a plot of 280 plants equalled 388 quarts. While one quart to the plant is the usual thing expected, and disappointment infrequent indeed, we will take absolute figures obtained by one grower. 3,200 quarts which sold at from eight to thirty cents per quart. Returns figuring \$640 gross, which left a net of \$610.

Trucking, Garden and Orchard.

WORK FOR THE MONTH.

The genial weather of March and April caused fruit trees to come forward very early with their bloom and the frosts we had on two days in the middle of April have done serious injury in many sections. We have secured reports from the principal fruit growing sections as to the extent of this injury, which will be found in this issue. It is gratifying to know, however, from the latest reports received that this injury seems to have been over-estimated and that at any rate there is still every reason to expect a fair crop of apples of the winter varieties and at least a few peaches from the higher lands and of the late varieties. The strawberry crop will be later than usual, as the earliest blooms were largely killed. The indications are for a fair yield from the later blooming.

If our advice given in the last two issues has been followed, the land intended to be planted will be now in good condition, and as the danger of frost is past, full crops of all vegetables may now be sown or set out and this work should have immediate attention. The land should be freshened up by running a cultivator through the rows before sowing the seed or setting out plants from the cold frame. Plant all the crops in rows wide enough apart to allow of horse cultivation. Where this is not done the crops are very apt not to receive that attention which their need demands. If cultivation depends on the hoe, it will often be neglected in the press of other work on the farm whilst there are few farmers who will not spare an hour a day once or twice a week to run through the crops with a horse cultivator and thus keep them growing. We wish we could persuade every farmer in the South to give that attention to a garden which its value to the comfort and welfare of the household entitles it. If we could we should see a marvellous change. Quite recently we had a gentleman in the office who had been travelling through this and the adjoining Southern States and he said that one thing which had impressed him greatly was the absence of gardens on the farms and the consequent absence from the tables of the farmers of vegetables of any kind. There is no doubt great truth in this and it is a reflection on our people who could and should have vegetables on the table all the year round of almost every kind. We would strongly urge that this should be changed. Sow at once English peas, onions, spinach, carrots, beets and Irish potatoes and set out cabbages and then follow with corn, snaps, beans, lima beans, pole beans, squashes, cucumbers, tomatoes, canteloupes, melons, peppers and egg plant, and at the end of the month sweet potatoes may be set out. Successional crops of all these different vegetables should be set out every week or ten days so as to carry on the supply right up to the winter months. Irish potatoes planted now will make good summer and early winter fall potatoes, but for winter use the sets should not be planted before July.

The fall set cabbages should be kept growing by frequent cultivation. A top dressing of nitrate of soda applied down each side of the rows will push them forward to heading and much increase the yield.

The picking and shipping of the strawberry crop where it is grown for market will call for attention this month. See that you have boxes and crates ready and arrangements made with the commission merchant and freight agents for handling them. Do not wait until the last moment and then be disappointed that your fruit is not properly handled. Cool off the berries before crating and see that they are put up in a nice, attractive way, clean and well assorted.

Tomato plants should be hardened off and ready for setting out by the 10th of the month, and may continue to be planted all through the month. A sandy, loamy soil is best for this crop. The rows should be set out three feet apart and the plants be set three feet apart in the rows. Where farm yard manure is available, put a good forkful in the row where each plant is to stand and supplement this with a fertilizer made up of 800 pounds of acid phosphate, 300 pounds of muriate of potash and 700 pounds of cotton seed meal, using this mixture at the rate of 400 or 500 pounds to the acre and then when the plants commence to grow apply a top dressing of nitrate of soda at the rate of 150 to 200 pounds to the acre applied in two dressings, being careful not to apply it on the plants themselves, but only around them.

In preparing the rows for the canteloupes, melons and cucumbers, lay them off six feet apart for the canteloupes; eight feet apart for the melons, and four feet apart for the cucumbers, and plant the seeds in the rows at the same distances apart. Put several seeds in each hill and after they have made the second leaves, thin out to one or two plants. Put a forkful of manure in each row at the place where the seeds are to be set and spread a handful of rich fertilizer on this and mix with the manure and soil and then plant the seeds. Keep well cultivated until the vines begin to run. Dust the young plants with tobacco dust or with a little lime in which a few drops of carbolic acid or kerosene has been mixed to keep off the bugs. Plow the soil to the hills after the vines begin to run and thus place them on a bed to keep them well drained. Cultivate until the vines are in the way, but do not disturb the vines to do this.

Sweet potatoes should be set out at the end of the month or in the beginning of June. A light, sandy loam is the best soil for this crop. Do not make it over-rich, or they will run too much to vine. A good fertilizer for the crop may be made by mixing 300 pounds of cotton seed meal, 100 pounds of acid phosphate and 100 pounds of muriate of potash and applying this quantity per acre.

FUNGUS DISEASES OF THE IRISH, OR ROUND POTATO.

The potato, *solanum tuberosum*, one of the most important economic vegetables, was introduced into Europe from South America about the middle of the seventeenth century. Its value as a food and the comparative cheapness of its production have caused it to be widely cultivated in America, which country stands fifth in the number of bushels raised per year. However, many millions of bushels are imported annually from Germany. This is partly owing to the fact that our farmers are able to raise other and more lucrative crops, and partly to the diseases and insect pests which sometimes render potato growing a precarious venture.

The chief fungus enemies which cause such ravages among potatoes in this country are: the blight, potato rot, scab, bacterial disease, rust and leaf curl.

Early Blight (*Alternaria solanum*).

As its name indicates, the Early, or Leaf blight, is confined to the stems and leaves of the potato. It is noticed on the vines early, at about the time the tubers begin to form, although if, for any reason, growth has been retarded, it will appear earlier.

Its first appearance is on the leaves, on which it forms grayish-brown spots, which become brittle and hard. These spots increase in size, and in from three weeks to a month all the leaves of an infected plant will have withered. The stems remain green for a slightly longer period, but finally die. From the first appearance of the disease the fungus takes all nourishment from the tubers, and this causes a complete failure of the crop.

The best method of combatting this disease is to spray with Bordeaux mixture (see formula for mixing at the end of this article) from a fine nozzle. The first application should be made very early, and it is best to dilute the spray somewhat, in order not to injure the delicate young leaves.

Potato Rot (*Phytophthora infestans*).

Phytophthora infestans, late blight, rot, or simply potato disease, as it is called, is probably the most destructive of all potato diseases. It originated in this country, it is thought, and is now prevalent throughout the United States and Europe.

Its spread is fearfully rapid, and its appearance among potatoes very sudden, which qualities add greatly to its destructive power. It affects the leaves, stems and tubers, although its first indications are small brown patches on the leaves, which curl, decay and emit a characteristic disagreeable odor. Examined with a glass, these brown spots will be seen to be ramified with delicate white strands of mycelium, which emerge through the stomata in the form of numerous straight-stemmed conidiophores. These bear single-celled, ovata, colorless conidia, or summer spores, which are dispersed by wind, rain and other means, and spread the disease rapidly from plant to plant. The conidia, falling upon a damp surface, germinate and produce several zoospores, which have a slight motile power. These, in turn, germinate and send out a slender stem, which pierces the host and forms a new mycelium. The mycelium will pass from the leaf, down the stem and into the tuber, thus affecting both.

The diseased potatoes have depressed, dark colored spots

on the exterior, and inside brownish rotten streaks will be noticed.

The mycelium lives through the winter in the tuber, and for this reason no diseased potato should be left in the soil or stored; as in the latter case, the rot readily passes from one to another.

Bordeaux mixture can be used to good advantage in checking the disease in the summer. Diseased tubers should never be used for seed, and care taken in not storing, but burning affected potatoes will hinder the ravages of the Rot to a great extent. Some varieties of the potato are almost immune to this disease.

Potato Scab (*Oospora Scabies*).

The next most important potato disease is the scab, (*Oospora Scabies*). This is a very widespread fungus in soils used for potato growing, and forms the familiar rough, hard patches on the tuber.

It affects the tuber only, and is very hard both to detect and to combat, on account of its living beneath the ground. When the affected tuber is dug up, a very delicate white mold is sometimes evident on the rough scab. This, however, soon disappears when exposed to the air.

As the disease is carried by means of affected seed or scabby potatoes left in the soil, care should be taken to use only perfectly healthy seed, or to thoroughly sterilize it before planting.

Corrosive sublimate is probably the best sterilizing agent for this purpose, although its dangerous properties give formalin the advantage over it. Formalin is most excellent, and seed from tubers which have been immersed for two hours in a solution of one pint formalin to fifteen gallons of water may be planted with impunity. Formalin, or formaldehyde, is comparatively inexpensive, and may be obtained from any drug store.

Brown Rot (*Bacillus solanearum*).

The so-called Brown Rot, a disease caused by bacteria, and which affects also the tomato and the egg plant, is very prevalent among potatoes in the South.

The foliage of an infected plant suddenly withers and shrivels, when infected with this disease. The tubers become affected through the stem, and their tissues turn black and decay rapidly.

Insects carry the Brown Rot to a considerable extent, and should, therefore, be held in check as much as possible when a field is seen to be affected. Careful burning of all dead plants will greatly retard the spread of this disease. As a last resort, crop rotation will generally kill out the Brown Rot.

Potato Leaf Curl (*Macrosporium solani*).

The Leaf Curl is about the only other potato disease of much economic importance to farmers.

It affects the plants, usually close to the ground in the first stages, gradually creeping up to the leaves. These soon begin to curl, and after a short time the whole plant withers and collapses. Shortly after infection, the conidia, or seed-like bodies of the fungus appear on the leaves and stem in blackish, velvety patches. They are large, olive colored and many celled.

The disease producing fungus will persist on fragments of leaves or stems, hence, all "tops" should be collected and burned. This, together with thorough spraying with

Bordeaux, begun early, will prevent the disease from doing great damage.

*The applications of Bordeaux mixture, recommended in the case of the Late Blight, are also efficacious in the case of the Leaf Curl.

Fungous Diseases of the Tomato.

The tomato, for centuries looked upon as a deadly poisonous fruit, was first used as an article of food in the nineteenth century, and its succulent and healthful qualities have brought it to be one of the most highly prized articles of food.

Its cultivation in America is attended by a large number of parasitical moulds and rots, from the seedling stage up to the storing of the picked fruit. In respect to the diseases which prey upon it, the tomato resembles the potato, for many diseases affecting the tuber find a ready host in the tomato. This is true of the *Macrosporium* and *Phytophthora*, both of which are veritable scourges of the potato as well as the tomato.

Tomato Leaf Rust (*Cladosporium fulvum*).

This is quite an important disease. It is chiefly found upon the young leaves and stems, although at times it will cause a rust upon the young fruit. It appears as small brown spots on the leaves, which increase in size until the whole leaf becomes affected. The under surface of the affected leaf is covered with rusty brown patches, caused by closely packed conidiophores bearing two-celled conidia at their tips. The stem of a diseased plant sometimes shows blackish striped leaves, which are attacked by the Rust, wither and die.

When sprayed early with a dilute solution of potassium sulphide or Bordeaux mixture, the disease can be checked. The spraying should be renewed at short intervals, and diseased plants should be removed to prevent an epidemic.

Damping Off (*Pythium de baryanum*).

The Damping Off fungus, so destructive to all seedlings, is particularly active on those of the tomato. The fungus attacks the seedling at the point where it comes from the ground, and causes the decay of the tissues at this point, so that the plant withers and falls over. A delicate white mould is observed at this point, which is caused by the mycelium of the fungus, and upon this mycelium grow numerous one-celled, spherical seed bodies. These are conidia and readily germinate under damp conditions. A resting spore is also produced, which remains dormant in the ground for a period before germination.

Although the Damping-Off is easily caught and spread, it is almost as easily stamped out. Dry, clean, well drained beds, with plenty of sunlight, is a sure cure.

Wilt, or Sleeping Disease of Tomato (*Fusarium lycopersici*).

This is sometimes called the Summer Blight of Tomatoes. It attacks the vines after they have attained a fair growth, causes a gradual blackening of the leaves and wilting of the stem at the base, so that the plant finally collapses and dies.

The roots are affected also, some of the larger laterals showing badly decayed ends. In fact, the fungus gains an entrance through the roots of the plant. It creeps up the stem, clogging the water channels and causing the characteristic wilting.

A whitish mould appears on the stems after the wilting has begun. This consists of conidiophores, bearing whorled branches of conidia, which fall to the ground and spread the disease. Another type of spore is produced, having the shape of a spindle, which germinates very quickly, and aids materially in the spread of the disease.

The infected roots produce a third form of spore, which is a resting stage of the fungus.

Fungicides are of no value in combatting this disease, but by removing at once the affected plant, mixing quicklime with the soil, and a careful selection of healthy seed, the disease can be held in check. Crop rotation will prove efficacious also.

Tomato Black Rot (*Macrosporium tomato*).

This is a very prevalent rot of the tomato, and attacks the fruit most frequently. It is a wound parasite, the spores readily lodging and germinating in the style, the point of insertion of the stem or any other crack or wound in the plant or fruit.

When infected, a dark colored mycelium penetrates the tissue, forming a rotten spot within the tomato, and in consequence of the rotting of the tissues a sunken region appears on the surface. Later on, blackish olive colored spores are produced on these spots. The spores are many celled, and germinate quickly under damp conditions.

Thorough spraying with potassium sulphide at frequent intervals will control the disease. All infected parts should be cut off and burned. Fresh stable manure is said to be very harmful in that it aids the fungus to spread.

Bacterial Diseases of Tomato (*Bacillus solanacearum*).

This disease is due to the same bacteria which cause the wilting of potato vines. The bacteria enter through the leaves, penetrate the stems and fruit, causing decay of the woody fibres, and producing the yellowish drops which will ooze out from a cut in an infected plant.

The tomatoes become brownish or blackish and rotten.

Rotation of crops, removal of infected plants and keeping insects in check seem to be the only method for controlling this disease.

The Point Rot.

The well known Point Rot, which produces a hard, black mass in the interior of the fruit, is due to an unknown cause. In some years the loss from this disease equals that from all other diseases combined. As yet no satisfactory treatment has been discovered, although certain varieties seem to be less susceptible than others.

Fungicides.

I have made reference to Bordeaux mixture and potassium sulphide solution. These are very efficient fungicides, and can be prepared as follows:

Bordeaux Mixture.

(5-5-50.)

Bluestone	5 lbs.
Quicklime	5 lbs.
Water	50 gals.

Dissolve the bluestone and slake the lime in separate barrels. Dilute the bluestone with half or more of the water, then strain in the lime mixed with the remainder of the water.

Potassium Sulphide.

Water2 1-2 gals.
 Potassium Sulphide1 oz.

Dissolve the potassium sulphide in a quart of hot water, and make up the remainder of the 2 1-2 gallons with cold water.

C. T. ADAMS.

Blacksburg, Va.

**THE CONDITION OF THE TRUCK CROPS IN
 TIDEWATER VIRGINIA.**

Editor Southern Planter:

The spinach growers are busy harvesting the remnant of the crop. Those who had a large acreage of late spinach were very fortunate indeed. The weather conditions during the month of March were very favorable to its development. Recent shipments have sold for \$1.50 to \$2.50 per barrel. Practically all of it will be shipped by the 25th of April.

Cabbage is making a fairly satisfactory growth. The absence of rain during the early part of April checked it in some localities. The early planted cabbage continues to shoot seed stalks, but what was planted later in the season is developing very satisfactorily. Some of the early growers will have cut a small amount by the 20th of April. The outlook for peas is promising. A few cucumbers were planted on the 6th, and some sooner. The outlook for strawberries was exceptionally good prior to the recent frosts. It is difficult to estimate the amount of damage caused by the cold weather, but it is variously placed at from ten to twenty-five per cent. The scarcity of seed beans will tend to reduce the quantity planted. Irish potato growers are suffering a heavy loss caused by the tubers rotting in the ground. This loss is estimated from ten per cent. in some instances, to seventy-five per cent. in others. It is impossible to arrive at an accurate estimate at this writing. The loss is the heaviest in localities where seed from the North was used.

T. C. JOHNSON.

Va. Virginia Truck Expt. Station Norfolk, Va.

In a later letter, Professor Johnson says, "I really do not think the recent frosts did as much damage as some of the growers thought."

TO VIRGINIA FARMERS.

I take this means of inviting you to become a member of the Virginia State Horticultural Society.

There is no other State in the Union that has as many natural advantages in growing horticultural products as Virginia, and the only reason that Virginia is not classed as the greatest fruit producing State, and Virginia fruit growers known to be the most prosperous of all others is wholly the fault of ourselves.

Within the past few years fruit growers in certain sections of some of the fruit growing States have made a science of growing and marketing fruit, and so great has been their success that other States have followed their example.

For lack of scientific management and co-operation in growing and marketing fruit, Virginia does not receive the credit that is due her, nor do our fruit growers reap the reward that would otherwise be theirs.

Realizing the necessity for concentrated action, the Virginia State Horticultural Society has determined to enter upon a vigorous campaign for memberships, and then by distributing full and complete instructions to members on the subjects of cultivation, fertilizing, pruning, spraying, packing and marketing, we hope to place Virginia in the front rank as a fruit-producing State, and enable the fruit growers to receive prices that other scientific fruit producers obtain.

Our instructions on cultivation, fertilization and pruning are written so they are easily understood by all.

Our instructions on spraying tell the different materials to use, how to mix and when to apply for San Jose scale, apple scab, codling moth, bitter rot, and other insect pests and fungus diseases.

Our instructions on packing are very complete and practical, and contain specifications for classing as to size, color and quality for the several different grades. This will secure a uniform grade for Virginia fruit, and if followed by growers, will result in incalculable benefit.

Our instructions on marketing treat of the advantage of co-operation in selling, and give information as how to proceed to organize.

Before the packing season arrives the Society mails to all its members a forecast of the probable price of apples based on the condition of the apple crop throughout the entire country. In the past this forecast has been very accurate, and has saved many dollars for our members.

Each member receives a copy of the Annual Report, which contains a complete report of the proceedings of the annual meeting, including addresses on many subjects, questions and answers, lists of premiums awarded, and a statement of the financial condition of the society. So great has been the good accomplished that the State Legislature has contributed \$2,500.00 to the support of the Society, and this sum, together with the amount received as annual dues, is expended for the betterment of the horticultural interests of Virginia.

We are striving to secure a large membership, and hope to receive sufficient aid from the State to enable us to send competent men into neighborhoods to instruct growers how to plant, prune, spray and cultivate their orchards properly; and if we can accomplish this end, fruit growing will become the most profitable industry in the State.

The annual membership dues are one dollar, and each member will receive, free of cost, a copy of the annual report, all our pamphlets of instructions, our forecast of prices, and all other literature issued by the Society.

On mailing to me one dollar, a certificate of membership will be mailed you, and your name entered on our list of members, and you will be entitled to all the rights, privileges and benefits of the Society.

WALTER WHATELY Secy.

Crozet, Va.

**DAMAGE DONE TO FRUIT AND TRUCK CROPS
 BY THE FROSTS.**

We addressed a letter to a number of the principal fruit growers, and also to the gentlemen in charge of

the horticultural interests of the State, asking their estimate of the damage done to the crops by the late frosts. We have received the following replies up to the time of going to press. From these it will be seen that whilst serious damage has been done in most sections, yet that there is still a probability of a fair yield of winter apples, and some peaches. The damage done to the peach crop in the more Southern States is very serious, though we are glad to notice that in parts of Georgia there is still a prospect for a moderate crop:

The late winter and spring months have been very unfavorable for the prospect of a good fruit crop. The warm days we had in February unduly swelled the buds, and later cold snaps in March and April found them in such an advanced condition as to be very susceptible to injury. The two recent freezes in April have caused a great amount of damage. So far as I can estimate from reports received, the peach crop is practically lost, still some favored localities say they still have live fruit buds, but I think there is no doubt but that the large majority of the crop is lost.

Cherries may be placed under same condition. Plums appear to be all destroyed, with the exception of "Wild Goose," and Damson. Pears are mostly, if not entirely killed.

Apples appear from reports to have suffered injury varying in extent in different localities. Here in Albemarle county the "York Imperial" and "Ben Davis" seem to have suffered most of the Standard Commercial varieties, reports indicating that they are about all killed. Pippins are reported as being damaged with a very wide range as to extent thereof. Some orchardists here in Albemarle say they have as fine a prospect for a crop as ever in their experience, there being such a full bloom that those killed will not be noticed. Other men lower down say their pippins are badly damaged, and in some of the lower orchards I am told a living bud has not been found.

Winesaps do not appear to be seriously damaged, indications are that there will be a good crop of them.

"Spitzenburg" is reported as not being damaged at all, and thus shows itself as being a hardy tree. From all experiments with this variety so far it seems as though it will be a satisfactory money maker to plant here much more largely. "Pilot" also is uninjured. Summer apples are badly damaged.

I have given you reports of conditions as far as they can be estimated at the present time. But it must be remembered that no fruit, not even stone fruits, have "set" yet, and no reliable estimate can be made until the crop has advanced to that stage. Next month is the earliest date when a reliable estimate can be made. I have observed hardly a year passes but that there is a spring freeze when first reports are far worse than is really the case. And it is quite possible that more fruit may appear in May than is now thought. There seems to be no doubt but that there will be a crop of apples.

Only the earlier blooming strawberries have been killed

in the Mountain Fruit Belt, which will merely have the effect of retarding the ripening of berries a few days.

WALTER WHATELY, Secy. and Treas.,
Virginia State Horticultural Society.

Since writing the foregoing, I have received numerous reports from different sections, and they all indicate that since bloom came out on the apples that there is not much injury apparent—nothing like so much as previously reported. Mr. Norman, the Manager of the Miller School orchards, who a week ago was very down-hearted at the prospect, says: "I find the pippin apples improving in prospects right much and the fruit in my Coveville orchard less injured than I feared.

W. WHATELY.

Yours received, and I herewith hand you report on fruit injury:

Peaches.—Salway and Bilyeu peaches on mountain five hundred feet above valley level, commercially uninjured. Elberta, Mamie Ross, Greensboro, etc., on ridge one hundred and fifty feet above valley level, commercially destroyed.

Pears.—On ridge one hundred and fifty above valley pistils killed on Keiffer and LaConte, but, apparently, fertilization had taken place, as they continue to grow and promise a full crop.

Cherries.—One hundred and fifty feet above valley, Tartarian and Ey La Mamie, commercially killed; some other varieties fair crop indicated. Quinces in valley commercially destroyed. Plums one hundred and fifty feet above valley, killed. Apples varying from serious injury to a few early blooming varieties situated in low spots to no injury as elevation is gained. The leading varieties of Winesap, York Imperial, Albemarle Pippin and Ben Davis, even where injured at all, have live buds left in practically every cluster, and, if these set, no appreciable difference will be made in the final crop.

GEO. E. MURRELL, Late President,

Bedford Co., Va. Virginia Horticultural Society.

I have your favor of the 14th, and, in reply, will state that I have not been able to make personal examination of the orchards in many sections of the State since the cold weather of April 10th and 11th. I did have an opportunity to make personal examination in Loudoun and adjoining counties at that time.

You, no doubt, are familiar with the fact that the Blue Ridge is not so high at this point as further South, and that the surrounding country shares this lack of elevation. However, the matter of elevation is a relative one, and even at this point, where the elevation varies from four hundred and fifty to about seven hundred and fifty feet above sea level, the fruit was injured far more on the lower than on the higher elevations.

Peaches, pears, cherries and plums, except Wild Goose and others of that type, were killed on the lower land. I also examined apple buds on the lower elevations, where from fifty to seventy-five per cent. of the fruit buds were killed.

Peach bloom was not more than one-half open, in

many instances, and the apple had not begun to show red, but neither appeared to be able to withstand the severe cold.

On the more elevated spots less damage was done. In many cases peaches were almost uninjured, while apples did not appear to be injured at all—certainly very slightly. This was the case especially on the Western slope of Cotocton Mountain, a ridge of land extending in a northerly and southerly direction across Loudoun county, which is well suited to fruit growing, and also to general farming.

We have had reports on peaches from sections of Warren and Fauquier counties also. Buds cut on the 15th and sent to this office from trees that were sprayed with the lime-sulphur preparation during March, show considerable injury from the cold, from twenty-five to seventy-five per cent. of the buds being dead. Heath, Smock and Stump were injured more than the other varieties examined. Not more than twenty-five per cent. of the bloom on Elberta, Bilyeu Comet, Carmen and Salway showed injury. While considerable of the fruit will drop, no doubt there will be enough left for at least seventy-five per cent. of a crop of the varieties least injured.

The above mentioned buds were taken from orchards elevated from one thousand to one thousand eight hundred feet above sea level, which no doubt accounts for the small amount of injury. The bloom came out a few days later at these points, hence was not quite so far advanced when the freeze occurred, and the freezing was not quite so severe. The coating of lime sulphur no doubt also helped to retard the opening of the buds.

Reports from other points in the county not so elevated indicate that the injury was far more severe.

Reports from Fairfax county indicate the injury to be worse than mentioned above for Loudoun and Warren.

A correspondent from Greensville county states that apples, pears, peaches and plums are killed.

At Blacksburg a temperature of seventeen degrees below the freezing point was experienced, and practically all stone fruits, except Wild Goose plums and others of similar type, were killed.

Pears were also practically all killed.

A few varieties of apples are injured, but the main commercial varieties I have examined appear to be in good condition, little damage having been done by the cold.

J. L. PHILLIPS,
State Entomologist.

I have your letter of the 14th, and, in reply, will state that the recent cold snap did a great deal of damage to the fruit crop in this section of the State. Practically all peaches, plums and cherries were destroyed outright by the freeze. I do not think that the pear and apple crop are injured at all and, at the present time, we have an excellent outlook for a good crop of these and other later blooming fruits.

H. L. PRICE,

Experiment Station, Blacksburg, Va. Horticulturist.

Your letter of the 14th instant addressed to our Mr. W. T. Hood duly received and noted. In reply, we beg to state that the late freezes have affected very much

the strawberries in the vicinity of Richmond, and we estimate that the crop will be cut short as well as delayed. We have received practically no reports concerning damages over the State, except from the vicinity of Buckingham and adjoining counties. From the reports received from that section, it is evident that considerable damage has been done, especially to the peaches, plums and pears. In Albemarle county peaches, plums and pears have suffered and some varieties of apples.

W. T. HOOD & CO.

Richmond, Va.

Yours of April 14th received, and in reply you will find clipping from one of our county papers that I think expresses the situation very well.

I am convinced that the early blooming apples have been damaged a great deal, and some orchards are worse than others. Our peaches are all killed. Pears and plums have suffered a great deal, but we hope a few are left.

Now, as to the winter variety of apples, and the commercial orchards in our section, I am inclined to believe that there will be some fruit yet of such apples as York Imperial, Ben Davis, Winesap and a few other varieties. I can tell a little better later and will write you the facts.

W. A. McCOMB, Secretary,

Augusta Co. Fruit Growers' Assn.

From the Augusta county paper referred to: It is feared that crops in the valley have been injured to a large extent during the past week and fruit growers and farmers are much concerned about the situation.

Other parts of the State are in the same fix and indications are that losses to fruit and vegetables from the cold weather will be much heavier than was at first supposed. It is estimated that in this section of Virginia, comprising five or six counties, the loss to fruit growers, owing to the freeze of Saturday night and the night before, will amount to no less than a million dollars.

The loss to Roanoke and Botetourt counties will be at least \$100,000 each. Information from every section is to the effect that pear, peaches and cherries have been totally destroyed, and it is believed that all apples are killed.

Luray, Va., April 12th.—All early fruits are reported to have been killed by the severe weather throughout the Shenandoah Valley Saturday night. Much of it in the lowlands was out in full blossom, and if any of it escaped the very dry atmosphere was the cause. Orchardists are of the opinion that the later and hardier varieties were uninjured.

Harrisonburg, April 12th.—From Rockingham county, the valley as well as other portions of the country come most discouraging reports in regard to the destruction of the fruit crop by the cold weather of the last few days. L. J. Heatwole, the weather observer, telephoned the Daily News last night that the thermometer on Saturday night went down to thirteen above zero, which, in other words, is nineteen below freezing point. Great damage has been done to the early fruits and the loss in Virginia is estimated at half a million dollars.

In the valley the peaches, pears, plums and cherries are reported to be dead. The apple crop alone seems to have escaped.

Your letter asking me to estimate the damage done to fruit in the State by the late freeze has been received. I am unable to anything like approximate it. All the small fruit is killed, and apples have been very materially damaged in this section. The loss will be very great.

Augusta Co., Va.

W. W. SPROUL.

In reply to your favor of recent date would say on investigation in this section we find damage to the small fruits as follows: Peaches, pears, plums and cherries are practically all killed. The pippin apple crop is damaged at least one-half; the Winesaps not so bad, but it is too early yet to tell whether they will set or not.

Albemarle Co., Va.

M. L. McCUE.

Your favor requesting report from me as to damage to fruit crop by recent frosts is before me. A few days ago I reported to News Leader that apples were unhurt in this section; pears partially injured, and cherries pretty much all destroyed. A revision of that report simply confirms it, except to say cherries have opened up anew and from present indications there will be much more than a half crop; plenty of pears, plums and a full crop of apples. On the lower levels there will be few peaches, but in the high attitudes a full crop may be expected from present indications. The magnificent orchard of Hon. Geo. E. Murrell, at Fontella, Bedford county, escaped unscathed, and the reports from Patrick county indicate a bountiful crop. I will visit that county next week and if I find it otherwise will report to you. Some calamity howlers say much injury is done, but these same pessimists forget that it is necessary for five-sixths of the blooms to be destroyed in some way or the trees would be too full of fruit to make the most in bushels or quality.

April 11th was the coldest morning I ever knew at this point, and I couldn't find a sweet cherry alive the next day, but since the blooms have all expanded I notice plenty of fresh green pistils to make a fair crop. So far, Southwest Virginia is all right in the fruit proposition.

HENRY C. WYSOR.

"MIXED PEAS."

Some years ago I tried some of the mixed cowpeas advertised in a Virginia seedsman's catalogue and was more than pleased with the result. I found that if I wanted plenty of vine I certainly got it; I had black cowpeas and another variety planted the same year, but neither did as well as these mixed ones.

Subsequently, I ordered some more. I did not examine them until I began planting and then found a large proportion was nothing else than Canada field peas that all of us know are of no value in Virginia. Sure enough the Canada pea came up and as soon as the hot dry weather struck it it promptly died, leaving only a pool stand of cowpeas. I thought this mixing might be either accidental or that only the seedsman this lot came from had resorted to this method, and the following year bought mixed peas again from another seedsman only

to find the same fraud, but rather worse. I should say at least twenty-five per cent. was Canada field peas, a cheaper article than the cowpea and absolutely of no value to us here. As a matter of fact, the mixed peas sold thus really cost far more per bushel than advertised, because the farmer is only buying about three-fourths of a bushel of cowpeas and soja beans and paying for a bushel. I noticed too that they were no longer quoted as mixed cowpeas, but mixed peas. Now, to prevent other farmers being caught as I and plenty more have been, I write this to draw attention to the trick.

This year I wanted some cowpeas and asked a seedsman what he had. He told me "mixed." I declined them; he hastened to tell me they were all cowpeas with no Canada peas in them, and, on inspection, I found they were as represented, and have bought them. I hope this warning will benefit some of your readers. I do not mention the names of the seedsman who have been selling the Canada peas in their mixtures, but, of course, I know who sold me mine, and my neighbors have noticed the same thing. I believe it will be a long time before any of us buy cowpeas from those seedsman again.

Albemarle Co., Va.

WALTER WHATELY.

We are glad to publish this warning and hope its effect may be to put a stop to the fraud thus perpetrated on the farmer. Canada peas should not be sown later in the South than February. Put in at that time, they make an excellent grazing crop for hogs in May, or can be cut for hay or green feed. As soon as the hot weather sets in they are affected with mildew and die down. They can be followed by cowpeas or a corn crop, but to mix them with cowpeas to plant at the time when cowpeas should be planted is a fraud on the farmer, as they cannot possibly make a crop. Mixed cowpeas will almost always make a heavier improving crop than any single variety.—Ed.

A NEW CLOVER CROP.

A new forage crop, the Clover Moellier, is described in the "Journal of the Victorian Department of Agriculture." It grows four or five feet in height, and yields a great quantity of succulent foliage, which may be cut off five times in a season, or, as the stems are fleshy, the whole plants may be chaffed for animals. All kinds of stock eat it eagerly, and it is said to be highly nutritious. It withstands drouth and frost alike. In a trial of the plant carried out by the official dairy supervisor, the weight of the first cutting of leaves was estimated at four tons per acre. The labor of cutting off the leaves and carrying them off the cropped land must be a great objection, except, perhaps, to occupiers of small holdings.—London Live Stock Journal.

The early potato crop promises to be simply immense. The area planted in Eastern North Carolina, at Norfolk, and on the Eastern Shore is wonderfully large, and any speculation as to the profitable sale of the crop is premature. Since there are no old potatoes held over to amount to anything, it may be that even the enormous planting this spring will prove profitable, but, seeing the vast potato fields at Norfolk and on the Eastern Shore, one cannot help wondering what the result will be.

Live Stock and Dairy.

DAIRYING IN VIRGINIA.

In connection with the awakened interest in dairying in the State which we are delighted to notice and have done what we could to promote, we are moved to say a word of warning to the farmers, especially of the Middle, Southside and Eastern sections. The wide awake creamery and dairy factory promoters of the West have noted what is going on here and, with that eye for business which is so especially distinctive of the men of that section, have hastened to make hay whilst the sun shines. They have descended upon our State and are seeking to locate and secure contracts for the building of creamery plants all over it. Already we hear of contracts being entered into and the stock subscribed for several factories, and inquiries are being made in other sections. We would most strongly urge upon our farmers to go slow in this matter, especially so in the sections we have mentioned. In the valley in Southwest Virginia and in Northern Virginia the conditions for the successful running of a creamery or butter factory are existant. There are dairy cows and the crops and pastures to feed them on and the sooner the farmers give their attention to the co-operative production of the finished products of the cows and the creation of business organizations for the marketing of these products, the better it will be for them, but even in these sections we greatly doubt the policy of handing over the erection of the creameries and factories and the creation of the necessary organizations to these professional promoters. They are not in the business for their health nor the good of their souls alone, their pocketbooks are more immediately concerned and, after the disclosures made as to their methods in other sections where they stocked companies and made farmers pay exorbitant prices for their help, we would urge especial care in dealing with them. We believe that in all cases local organizations promoted by the farmers themselves and the employment of local builders to put up the plants would result in great saving and be infinitely more profitable. If in these sections this be true, it is manifestly more important that in Middle, Southside and Eastern Virginia much greater caution should be exercised. These sections have neither the cows nor the pastures or crops provided to meet the requirements of more than a very limited number of creameries or factories. Indeed, from what we know of the one already established in Southside Virginia and which is especially favorably located in a section where dairying has received some attention for years, the difficulty already felt is the absence of the necessary number of cows to enable the plant to be kept fully employed. Farmers should realize that to run even a small factory profitably at least four hundred good cows should be kept within a convenient distance from the factory and that such a factory could just as easily and much more profitably utilize the milk of seven hundred and fifty cows. We hear of these Western men having already organized companies and gotten them to

enter into contracts for the erection of creameries where it is absolutely certain that there are not at present within the required radius of the factory half sufficient dairy cows kept to keep the factory running half its time and the worst feature of the case is that the cows cannot be had even if the farmers were ready with the crops and pastures to feed them and these are at present non-existent to a very large extent. This means that the capital to be invested must be largely unremunerative and discouragement and a setback to the industry must be the result. We regret that this is so, as we are most anxious to encourage the dairy business in this State. We are at the present time importing into the State three-fourths of the dairy products consumed therein. There is therefore an ample home market for a great increase in production, but the prime factors for meeting this are not creameries, butter or cheese factories, but more dairy cows and more pastures to feed them on and the building of silos and the growing of crops to fill them with and the making of forage crops. It is beginning at the wrong end to build the factories. One of the greatest openings we now know of for farmers in Virginia is the breeding of dairy cows. We have inquiries for them every day and each new factory or creamery erected means a greater demand. The type of cows demanded is not such as are to be found on the majority of the farms in Middle, Southside or Eastern Virginia. These may form the nucleus on which to build up better stock by the use of pure-bred bulls of dairy types, and the investment of surplus capital in the building up of such better herds is the first step which should be taken and, coincidentally with these, the erection of silos and the production of crops for feeding this better stock. This will be the work of a few years. Calves will not give milk, they will consume it. It requires cows of three years and over to keep creameries and factories running and these, to make their keeping profitable, must be cows producing at least five thousand pounds of milk per year. These cows can only be had in sufficient quantity and at a profitable price to meet the needs of creameries by breeding them, and we urge the attention of farmers to this matter at present rather than to the seductive stories of the creamery promoters.

LOSSES OF PIGS AND CALVES.

Editor Southern Planter:

In my work as a country doctor among farmers, I have had my attention called to a class of losses in both pigs and calves, of which I have seen no mention in the agricultural press.

First, as to pigs. The losses are always in winter or early spring, at farrowing time. The pigs come either dead or too weak to live or get on their feet. When examined, it is found there are no feet to get on, the hoofs being absent, with a muscular system so meagre and soft that the little fellow just dies for the want of strength to live. The mothers are usually in good condition, often fat and always having had a ration of little

but corn, or, what is more striking, the sow is fat from an abundant supply of nothing but acorns gleaned from the forest.

Now, observe the tissue deficiencies (muscle and hoof) in the pig are markedly protein structures. Observe also that the food (corn and acorns) has been most deficient in protein content. It is a case of "you can't get blood out of a turnip." Nature cannot produce a pig with proteid structure when the mother has had none in her food. Result: An unfinished and dead pig.

Second, as to calves. They are born without hoofs; without hair or skin for several inches up the leg; patches over body and limbs varying from size of a silver dollar to that of a good sized handkerchief without hair or perfect skin, and also with a conspicuously meagre muscular development.

The owner of these calves usually practices a system of nursing, washing and anointing, but I have yet to see a single cure. The end is either the calf dies or is killed.

These calves, like the pigs, are always dropped in late winter or early spring. Not once have I seen such animals born when the mother had been on grass for some months. The feed of the mother cow has always been corn stover for some months prior to birth of offspring. The factors are: A feed deficient in protein, and an offspring short in those tissues known to have a high protein content—hoofs, hair, hide and muscle.

Another point is that the mother, having the individual power of appropriating the small protein content of her food to the upbuilding of her own body, seems to be the one most likely to produce the deficient offspring, as I have noticed it is the mother that looks pretty thirfty on poor feed that is most likely to give births such as described.

The work of the Department of Agriculture on the effects of ergot on hoofs and sore legs in cattle led me first to suppose that the calf's condition in this respect might be due to ergot found on and consumed with the mother's food, and this may yet be found partly true. Personally, I am more inclined to the protein deficiency view. I would be glad to hear from the veterinarians on the subject for it seems to me a source of losses sufficiently severe to warrant an effort to learn the true cause.

Louisa Co., Va.

B. G. B. BROOME, M. D.

We have repeatedly urged the importance of feeding a well-balanced ration to breeding animals and young stock. You cannot have bone and muscle without providing food rich in protein. Corn is a carbohydrate feed which makes fat, but not bone or muscle. To get this you must feed cotton seed meal, bran, peas or oats, which are rich in protein to cows and calves, and peas, oat-meal or blood meal to pigs; also, feed some bone meal to the young stock two or three times a week. This strengthens the boney structure. Pigs fed bone meal have bones with a baeaking strain nearly one-third stronger than when fed on corn alone.—Ed.

PROGRESSIVE MOVE IN BREEDING.

Editor Southern Planter:

It does seem to me and others to whom I have men-

tioned the subject that our State Legislature should pass a law to prohibit the standing for public service of any stallion or bull with any hereditary unsoundness and the charging of a double license fee for a grade or unregistered bull or stallion. Also, to make it a crime to stand either a bull or stallion under a false pedigree, etc. This bill, if framed properly and passed, would do untold good to the farmers and breeders throughout our grand old State, which would in a few years be much benefitted by such a law.

JNO. F. LEWIS.

Rockingham Co., Va.

AN ACT TO PROTECT THE LIVE STOCK OF SOUTH CAROLINA.

Editor Southern Planter:

An act prohibiting the importation of diseased live stock into the State of South Carolina has recently been passed. Such a law became necessary owing to the passage of similar laws by other States.

Briefly summarized, the act is as follows: 'All shipments of live stock, except those for immediate slaughter, must be accompanied by certificate of health showing that the animals are free from contagious or infectious diseases. This certificate can be issued by the State Veterinarian or Assistant State Veterinarian in the employ of the United States Bureau of Animal Industry, or by any competent veterinarian authorized by the State Veterinarian of South Carolina. All health certificates must be in duplicate these certificates will be furnished qualified veterinarians and transportation companies (at actual cost), the original of which must be forwarded to the State Veterinarian of South Carolina, and the duplicate must be attached to bill of lading for said animals.'

All cattle over six months of age, except those for immediate slaughter, must be tested with tuberculin and must be free of tuberculosis before they are brought in this State. Temperature reports of the test or a certified copy of same must accompany the health certificate. The tuberculin test must be made within thirty days preceeding shipment.

The penalty for violation of this act is a fine of not less than \$500 and not more than \$1,000 or imprisonment for not more than one year. This act also allows indemnity for tuberculous and glandered animals destroyed by the State authorities. Previous to the passage of this act no indemnity has been allowed. The act will undoubtedly prove of great value to stock owners in this State and to facilitate shipments of live stock into South Carolina, the publication of this notice in your paper would be highly appreciated. Any further inquiries regarding this law will be promptly answered.

M. RAY POWERS,

Clemson College, S. C.

State Veterinarian.

REMOVAL OF FOOT AND MOUTH DISEASE QUARANTINE.

The Secretary of Agriculture has issued an order, effective April 24th, releasing entirely the quarantine for foot and mouth disease, as he is satisfied that the disease has been completely eradicated from the United States.

A GREAT JERSEY SALE.

The dispersal sale of the Louisiana Farm Jerseys, at Fredericksburg, Va., on April 9th, was a memorable and highly successful event. Notwithstanding the facts that the sale was hurriedly gotten up, and that the farm was inaccessible, and that terms were cash, there was a great gathering of Jersey breeders from fifteen or twenty States and Canada, who paid an average of \$244 for the 139 head of cattle offered.



"Going at \$7,000!" Stockwell Being Knocked Out to Dr. Rodman.

Fontaine's Gold Medal 203636, cow (10)—C. I. Hudson, East Norwich, L. I., N. Y., \$1,500; Eminent's Goldmont Lad 70268, bull (4)—Thomas Taylor, Jr., Columbia, S. C., \$800; Bull calf (2 mos.). Stockwell—Golden Fern's Red Rose, Biltmore Farms, Biltmore, N. C., \$700; Mon Plaisir's Fanny 203649, cow (9)—B. H. Bull, Brampton, Ont., Can., \$700; Golden Fern's Red Rose 168525, cow (11)—George W. Sisson, Jr., Potsdam, N. Y., \$685; Aristocrat's Fanny 203658, cow (6)—T. E. Kenney, Frankfort, Ky., \$610; Fern's Success 72247, bull (3)—A. P. Nave, Attica, Ind., \$600; Golden Fern's Niece 203634, cow (10)—Penhurst Farm, Narberth, Pa., \$525; Raleigh's Eminence 207105, heifer (2)—Ralph Izzard, Fredericksburg, Va., \$510; Golden Jolly's Twylish 203663, cow (6)—T. E. Kenney, \$500; Heifer (1), Stockwell—Fontaine's Gold Medal—Ralph Izzard, \$500; The Owl's Jessie 168528, cow (11)—Capt. M. B. Rowe, Fredericksburg, Va., \$400; Eminent's Rosy 203647, cow (8)—George W. Sisson, Jr., \$400; Golden Fern's Jubilee 161063, cow (10)—Thomas Taylor, Jr., \$350; Heifer (1), Stockwell—Golden Fern's Niece—J. L. Coffman, Urbana, Ohio, \$335; Lady Blonde of St. Helier 203635, cow (10)—E. H. Hatch, Maplewood, N. J., \$330; Tonona 9th of Hood Farm 172718, cow (8)—Ralph Izzard, \$325; Eminent Lucy Belle 203639, cow (7)—Thomas Taylor, Jr., \$320; Magnate's Interest 203462, cow (8)—Thomas Taylor, Jr., \$310; Stockwell's Brown Beauty 203697, cow (4)—Ralph Izzard, \$300; Bull calf (5 mos.), Stockwell—Mon Plaisir's Fanny—C. I. Hudson, \$300; Interesting Angela, 203454, cow (10)—Dr. H. D. Rodman, Shelbyville, Ky., \$300; King Fox's Baroness 202979, cow (4)—Edward Burnett, New York, N. Y., \$300; Heifer (1), Stockwell—Golden Jolly's Twylish—Dr. H. D. Rodman, \$285; Bull (1) Eminent—Golden Fern's Jubilee—Ralph Izzard, \$280; Bull (5 mos.), Stockwell—The Owl's Jessie—Ralph Izzard, \$275; Cow (4) Extra—A. J. Warren, Richmond, Va., \$270; Cow (8) Extra—A. R. Howard, \$260; Heifer (1), Stockwell—Aristocrat's Fanny—T. E. Kenney, \$260; Eminent of Wyldewood 75755, bull (2)—Thos. Taylor, Jr., \$260; Heifer (1), Stockwell—Mon Plaisir's Fanny—Captain R. C. Vance, \$250; King Fox's Jessie 195409, cow (5)—W. Rueger, Richmond, Va., \$250; Golden Fern's Tulip 183289, cow (11)—Ralph Izzard, \$235; Cow (3) Extra—Capt. R. C. Vance, \$205; Heifer (4 mos.), Eminent's Goldmont Lad—Aristocrat's Fanny—R. B. Swift, Libertyville, Ill., \$205; Heifer (1), Blue Belle's Golden Fern—Stockwell Brown Beauty—J. L. Coffman,

The great bull, Stockwell, for which Mr. Lewis paid \$11,500, was bought by Dr. H. D. Rodman, Shelbyville, Ky., for \$7,000. Fontaine's Gold Medal (Karnak), the famous old butter test cow, went to C. J. Hudson, East Norwich, N. Y., for \$1,500.

Virginia breeders supported the sale in excellent style, paying some long prices for a great deal of the stock. Among the heaviest buyers were Captain R. Conroy Vance, Mannsfield Hall, Fredericksburg, Va., Mr. Ralph Izzard, Fredericksburg, Va., The Acca Stock Farm, Richmond, Va., A. Randolph Howard, Fredericksburg, Va., and H. T. Pancoast, Purcellville, Va.

We append hereto a list of the cattle, which were sold for \$200 or more:

Imported Stockwell 75264, bull (6)—H. D. Rodman, Shelbyville, Ky., \$7,000; Fontaine's Gold Medal 203636, cow (10)—C. I. Hudson, East Norwich, L. I., N. Y., \$1,500; Eminent's Goldmont Lad 70268, bull (4)—Thomas Taylor, Jr., Columbia, S. C., \$800; Bull calf (2 mos.). Stockwell—Golden Fern's Red Rose, Biltmore Farms, Biltmore, N. C., \$700; Mon Plaisir's Fanny 203649, cow (9)—B. H. Bull, Brampton, Ont., Can., \$700; Golden Fern's Red Rose 168525, cow (11)—George W. Sisson, Jr., Potsdam, N. Y., \$685; Aristocrat's Fanny 203658, cow (6)—T. E. Kenney, Frankfort, Ky., \$610; Fern's Success 72247, bull (3)—A. P. Nave, Attica, Ind., \$600; Golden Fern's Niece 203634, cow (10)—Penhurst Farm, Narberth, Pa., \$525; Raleigh's Eminence 207105, heifer (2)—Ralph Izzard, Fredericksburg, Va., \$510; Golden Jolly's Twylish 203663, cow (6)—T. E. Kenney, \$500; Heifer (1), Stockwell—Fontaine's Gold Medal—Ralph Izzard, \$500; The Owl's Jessie 168528, cow (11)—Capt. M. B. Rowe, Fredericksburg, Va., \$400; Eminent's Rosy 203647, cow (8)—George W. Sisson, Jr., \$400; Golden Fern's Jubilee 161063, cow (10)—Thomas Taylor, Jr., \$350; Heifer (1), Stockwell—Golden Fern's Niece—J. L. Coffman, Urbana, Ohio, \$335; Lady Blonde of St. Helier 203635, cow (10)—E. H. Hatch, Maplewood, N. J., \$330; Tonona 9th of Hood Farm 172718, cow (8)—Ralph Izzard, \$325; Eminent Lucy Belle 203639, cow (7)—Thomas Taylor, Jr., \$320; Magnate's Interest 203462, cow (8)—Thomas Taylor, Jr., \$310; Stockwell's Brown Beauty 203697, cow (4)—Ralph Izzard, \$300; Bull calf (5 mos.), Stockwell—Mon Plaisir's Fanny—C. I. Hudson, \$300; Interesting Angela, 203454, cow (10)—Dr. H. D. Rodman, Shelbyville, Ky., \$300; King Fox's Baroness 202979, cow (4)—Edward Burnett, New York, N. Y., \$300; Heifer (1), Stockwell—Golden Jolly's Twylish—Dr. H. D. Rodman, \$285; Bull (1) Eminent—Golden Fern's Jubilee—Ralph Izzard, \$280; Bull (5 mos.), Stockwell—The Owl's Jessie—Ralph Izzard, \$275; Cow (4) Extra—A. J. Warren, Richmond, Va., \$270; Cow (8) Extra—A. R. Howard, \$260; Heifer (1), Stockwell—Aristocrat's Fanny—T. E. Kenney, \$260; Eminent of Wyldewood 75755, bull (2)—Thos. Taylor, Jr., \$260; Heifer (1), Stockwell—Mon Plaisir's Fanny—Captain R. C. Vance, \$250; King Fox's Jessie 195409, cow (5)—W. Rueger, Richmond, Va., \$250; Golden Fern's Tulip 183289, cow (11)—Ralph Izzard, \$235; Cow (3) Extra—Capt. R. C. Vance, \$205; Heifer (4 mos.), Eminent's Goldmont Lad—Aristocrat's Fanny—R. B. Swift, Libertyville, Ill., \$205; Heifer (1), Blue Belle's Golden Fern—Stockwell Brown Beauty—J. L. Coffman,



The Great Cow "Karnak" being Led Around the Ring for Inspection.

\$200, Lucy's Sweet Ruby 203709, cow (3)—Ralph Izzard, \$200; Golden Fern's Blue Princess 205408, cow (3)—Acca Farms, Richmond, Va. \$200; Cow (4) Extra—Acca Farms, \$200; Heifer (1), Eminent's Competitor—Interesting Angela—Dr. H. D. Rodman, \$200; Golden Maid's Beauty 203716, cow (2)—Edward Burnett, \$200; Eminent's Brookhill 190590, cow (4)—Thos. Taylor Jr., \$200; Tuua Mari-gold 136087, cow (11)—Ralph Izzard, \$200; Kathletta of Wyldewood 210955, cow (2)—H. T. Pancoast, Purcellville, Va., \$190. The balance of the stock brought from \$190 down to \$90.

Ringside Notes.

The veteran importer and breeder, Mr. T. S. Cooper, Coopersburg, Pa., was an interested spectator, and declared the sale a marvelous one.

Colonel A. M. Bowman, Bowmont Farms, Salem, Va., was another interested spectator whose advice was frequently sought by prospective purchasers. The Colonel could not be tempted to "wade in," however.

On being congratulated on his purchase of Stockwell, Dr. H. D. Rodman remarked that, "I did not think it fair for Virginia to have the three best Jersey bulls in the world, so I came to get one of them for Kentucky." The triangular fight for the bull between the Doctor, H. V. Prentice and Thomas Taylor, Jr., was spectacular, indeed.

The Kentucky contingent at the sale was among the most liberal purchasers. They were good bidders at all times.

Mrs. J. W. Henning, the Mistress of Allen Dale Farm, Shelbyville, Ky., was constantly at the ringside, but did not purchase. We understand, however, that she will be on hand at Cooper's Memorial-Day sale, as there is some stock there in which she is interested.

Dr. A. S. Wheeler, of Biltmore Farms, went after the two-months-old calf, by Stockwell out of Golden Fern's Red Rose, in a lively fashion, and finally landed it at \$700.

Prof. Herbert W. Mumford, of the University of Illinois, came East to see a great Jersey sale.

George W. Sisson, Jr., was a frequent bidder, and landed a particularly choice one in Golden Fern's Red Rose.

Capt. M. B. Rowe contested hotly with Biltmore Farms for the Stockwell-Red-Rose bull calf, letting go at \$675.

Mr. Ralph Izzard and Capt. R. Conroy Vance, near neighbors, by the way, certainly did themselves proud in the quantity and quality of the stock purchased.

Mr. A. Randolph Howard got a mighty good start in establishing his Chatham Dairy herd.

The Acca Stock Farm got a splendid carload of cattle, including some choice heifers.

Mr. A. B. Lewis expressed himself as gratified at prices obtained for the stock, and especially for Stockwell.

Around the Fredericksburg hotels the night before the sale, everybody was telling everybody else that he expected to "steal something," but the grand total figures of the sale indicate that there was very little stealing done. Not all of the cattle brought their worth by any

means, but considering the condition of the stock, and all the circumstances connected with the sale, the Jersey world should be satisfied. We predict that it will be many a day before Virginia will top the figures of this sale.

Hats off to W. R. Spann.

SHEPHERD.

STOPPAGE AT THE POINT OF TEAT.

By Dr. David Roberts.

A very common trouble in the ordinary dairy is to find an animal with the point of the teat closed, either due to a bruise of the teat itself or to infection of the milk duct, which causes a little scab to form over the point of the teat and unless this is properly handled with care and cleanliness, the infection is apt to cause a loss of the entire quarter.

The proper manner in which to handle and treat such cases is to thoroughly wash the teat in an antiseptic solution, then dip a teat plug into a healing ointment and insert it into the point of the teat, allowing same to remain from one milking to another. In this manner closure of the point of the teats can be overcome in a very simple and satisfactory way.

Never use a milking tube if it can be possibly avoided, as there is much danger of infecting the entire quarter by the use of the tube.

COTTON SEED MEAL AND THE EYES OF HORSES.

Editor Southern Planter:

I read your publication with interest, and as it is in a measure a clearing house for farmers to exchange ideas, I beg to suggest, in reference to feeding cotton seed meal to horses and mules, that great care be used. Over-feeding will weaken the eyes. I crush my corn, grain, cob and shuck, and use a handful of cotton seed meal at night to each head scattered over the feed. It is fine for stock, but over-feeding with it does affect the eye. Use cotton seed meal, but watch the eyes.

Early Co., Ga.

H. G. SMITH.

We should be glad to hear the opinion of others on this subject. We cannot find that any veterinarian has pointed out any such effect.—Ed.

COOPER'S ANNUAL JERSEY SALE.

Messrs. T. S. Cooper & Sons, of "Linden Grove," Coopersburg, Pa., will hold their Annual Jersey Sale at Coopersburg, May 31st this year, as Memorial-Day comes on Sunday.

Mr. Cooper advises us that the offerings this year will consist of about 130 head, and will be up to his usual high standard.

Many of our Virginia dairymen are going extensively into Jerseys, and we shall expect to hear of them being around the Cooper ringside on May 31st. The catalogue will be ready about May 10th, as usual.

The Poultry Yard.

POULTRY NOTES.

There is an unfounded prejudice against May hatched chicks. Many people think that May hatched chicks sleep themselves to death. This sleepy condition is an indication of indigestion induced by wrong feeding. Chicks hatched in any of the warm months must have different care and feed from those hatched during cool weather. In warm weather the aim must be to keep them warm at night and cool during the heat of the day. It will not do to confine the broods in close, warm coops at night and compel them to remain in the hot sunshine all day or go into the coops or brooders for shade. We must provide shade for them. If we have no trees in the yard, provide a shed made with boards, muslin or brush for them to get out of the hot sunshine. This shed must be open on three sides, North, East and West, and should be made to shed rain. Another very important matter is fresh water. It will not do to give them water once or twice per day. Have fresh drinking water for them in the shade all the time. Feed is the most important part of raising young chicks in hot weather. I have experimented many years with all kinds of feed and have not found any better feed than a mixture of millet seed and whole wheat. Chicks will eat whole wheat at one week old. Feed very little corn in any form to young chicks in warm weather. It is too heating and sours quickly. Give them a good run on grass and feed them sparingly the first two weeks. Keep the coops and brooders clean and well ventilated and do not allow them to crowd together. Many people think they cannot feed wheat at present prices. I am paying \$1.40 per bushel for wheat and consider it cheaper than any of the mixed chick or scratch feeds at \$2.40 per one hundred pounds. Much of this scratch feed is made up by seed houses and is composed of old, musty grains and seeds and is not fit to feed at any price. In addition it contains from ten to fifteen per cent. by weight of crushed stone and oyster shell that can be bought at one-half cent per pound. Deducting this shell and grit, we pay two and a half cents per pound for kaffir corn, sorghum seed, millet seed, cracked corn, oat hulls and dirt. Good, clean wheat at \$1.40 per bushel is all feed and costs but two and one-third cents per pound. I sold broilers a few days ago that were forty-eight days old and weighed over one and one-quarter pounds each that were fed very largely on wheat. If it pays to raise pork at six and seven cents per pound, then it certainly pays to raise chickens at thirty-five cents.

The laying hens also need a different ration now than in winter. I feed very little corn. Feed a mash once per day composed of one part meat meal, two parts corn meal, and three parts bran. I scald the meat and bran and then add the meal to make a crumbly mash. I feed soaked oats in the morning, the mash at noon, and whole wheat at night. I am getting a ninety per cent. egg yield on this ration and am satisfied that it gives me more good eggs than any other feed that I could get and at less cost.

I must repeat what I have said in these notes several

times in regard to adulterated feedstuff. Very much of the corn meal offered for sale in Richmond is made from unsound corn, and is positively unfit to feed to poultry, especially young chicks. The wheat bran is not pure, clean bran by any means. I have bought bran that had whole peanut hulls, wheat straw, chaff, oat hulls and chaff, ground corn cobs and the refuse from corn shellers in it. I cannot understand how these foreign substances can pass through rolls that crush wheat into flour without being reduced to pulp, but I have taken a quart of peanut hulls from a single bag of bran in addition to a full peck of straw, chaff, etc. These substances are not harmful or dangerous to health, but one can buy peanuthulls, straw, etc., for much less than \$32.00 per ton. It does seem that if we have a pure food law and inspection that as common a product as bran and meal could be inspected and the dealers and producers compelled to sell pure products or go out of business. If it is necessary to inspect whiskey and have it pure, and inspect milk and dairy products, why not the grain and feeds that enter into the production of these finished products? The same law that protects the toper should protect the man that makes the liquid damnation. The same law that compels the dairyman to make a pure, clean product should compel the miller to furnish him pure food for his cows. Let every man rise up and demand pure food for himself, his family, his herds and flocks and, in a short time, public sentiment will get so strong that inspectors will bestir themselves and give us a clean bill of fare.

I am in receipt of the following letter:

If Mr. Husselman has failed to make the pesky incubator hatch every egg, maybe he has had better luck in raising the chick. If so, will he tell us how to make what few we do hatch live beyond the three weeks period? I have been monkeying with incubators and brooders since 1888, but fail to thoroughly understand them.

My first machine was a very crude affair indeed. The heat was regulated altogether by the lamp flame; to see the thermometer I would have to pull out the egg drawer and peep in, which I did very often; yet I succeeded in hatching as many chicks and raising more of them than I do now with the patent up-to-date appliances. I got sixty to seventy per cent. hatches then, which is the best I can do now. I would be satisfied with a sixty per cent. hatch if I could make the little beggars live, or a majority of them. They are bright, active little fellows until four or five days old; then they begin to mope; don't seem to want to eat anything, and hug close to the warm places in the brooder until they die, which they do pretty fast after the fifth day. I have tried all sorts of brooders; hot air and hot water; top heat and bottom heat; indoor and outdoor; yet they die. Twenty years ago my little chicks were not bothered with bowel trouble like they are to-day. I am beginning to think the brooder does not cut much of a figure with the chicks dying. Now and then a brood will come through all right, no matter what brooder I put them in or how

they are fed. Why this is I cannot tell. Who can put me wise?
JAMES VANDEGRIFT.

Here we have the great problem of poultry raising in a nutshell. How to raise the chicks? Why do they die? I positively know two reasons. First, the way they are hatched; second the way they are fed the first few days. The great fault is in the way the chicks are hatched. In the incubator the egg is surrounded with dry, hot air and the albumen of the egg is all used up by the 15th to 17th day, and the chick then starves till the 21st day, and either cannot get out, or, if he does get out, he will be a poor weakling that will live until the yolk of the egg is absorbed, then he pines away and dies. If he gets out of the shell he is kept in a close, almost air-tight box for twenty-four to forty-eight hours and pants for oxygen. He comes out of the machine a puny little fellow that hugs any warm place because his blood has not been oxygenized and does not keep him warm. The chick that is hatched under a hen will have his head out in the open air and gets his lungs full of good oxygen and his blood is full of life and vigor. He is strong and his digestion is good and he will eat almost anything and live.

The chick that is hatched right will get weak from the same cause in the brooder and many times be overfed the first few days. This deranges his natural assimilation and he goes to sleep never to awaken. Hatch them right. If you cannot get plenty of fresh warm air into the incubator at hatching time take them out as fast as hatched and keep them warm for forty-eight hours, then feed them very sparingly for three or four days. Dry bread crumbs, pin-head oats, oatmeal flakes, etc., are best. Give fresh water. Keep them warm with plenty of fresh air around them and keep them hungry until they are eight to ten days old. Put them where they can get into the sunshine. Give them plenty of chaff to scratch in and put very little feed into it. Do not put too many in a brooder, fifty is plenty. This is the whole secret. Hatch them right, keep them dry, warm, busy and hungry and in small flocks.

Hen Proverbs.

If the hen house is clean and the nests are clean and the food and water are clean, the eggs will be clean. A dirty, stale egg is a libel on the hen and an abomination to her owner. It corrupteth his morals and causeth his purse to be lean.

This is the time of year when the egg swapper waxeth warm under the collar if you refuse to exchange a setting of your best eggs for a setting of scrub eggs. Wicked man that will not exchange a gold dollar for thirty cents.

This is the month that produces the "nice fresh country eggs," offered for sale next winter. The freshness of such eggs is a marvel of nature. Ditto the elastic consciences of dealers who sell storage eggs and placard them as "fresh."

Poets are born, not made, sayeth the sage. Likewise, the show-bird and the good layer. If you have good setting hens trust a few hundred eggs to their care. They will attend to the heat moisture, ventilation and turning and brood the chicks while you sleep.

If you have a burning desire to warm a dry goods box on a street corner in preference to watching the temperature in your incubator, don't cuss the machine if it fails to make good. Cuss yourself.

If your chicks mope around and look sleepy, it is quite possible that they have learned the trick from you. This "disease" is infectious, contagious and fatal.

The hen and her chicks begin work with the first peep of dawn and are "early to bed." The sluggard that sleepeth away the early morning hours loseth the honey of the morning dew and by the time he sippeth it, it has changed to vinegar. Too much vinegar causeth rheumatism and stiffness of muscles and joints.

The hen that layeth an egg every day hath a right to cackle, but very often the hen that layeth occasionally maketh the most fuss about it.

It is not always the hen that hath the finest headgear or the fanciest feathers that layeth the most eggs or broodeth her chicks the best. She spendeth her time on her toilet.

It is said that fortune knocketh but once at every man's door. She deals a knockout blow to many an ardent poultryman. Fortune comes and stays by him who courteth her daily, constantly, eternally. She taketh wings and flyeth away from the fickle, inconstant swain.

The following couplet is re-dedicated to the three hundred henman:

Somebody stole my old white hen;
They'd better let her be.

She always laid two eggs a day,
And Sundays she'd lay three.

Highland Springs, Va.

HUSSELMAN.

THE ORNAMENTAL FOWL.

Editor Southern Planter:

The little or no prominence given the ornamental breeds in the agricultural or poultry journals in our country emboldens me, with your permission, to say something in their behalf. The name "ornamental" conveys the impression to the uninitiated of something entirely separate and apart from utility, and the present-day American greed will respond, "Will it pay?" To beautify our homes with nicely laid out walks and drives, green, velvety lawns and choice flowers, though at great cost, gives back no return in dollars and cents, but the neat and attractive appearance of the surroundings, the sense of pleasure and comfort it gives banishes all regret for the outlay. There are few of the different ornamental breeds that will not more than pay for their "keep," and the amusement, interest and unceasing pleasure they give is alone ample compensation.

It is a common saying, that if we would sit down and write that which we have practically learned, upon almost any subject, the information imparted could scarcely fail of being useful. Just so far, my ambition extends. Nor is the world entirely without need of advice on the subject, notwithstanding its antiquity and the multitude of counsellors. Of this fact, I have had ample proof, having visited and also lived in many sections of the country.

I have seen some good specimens of the ornamental birds, that had been purchased at no trifling cost, yet

put into the same yard with common fowls. Of course, the identity of progeny would be lost. Again, I have known pens of nice birds to be purchased at handsome figures, placed to themselves, regardless of relationship, and with the idea of perpetuating the flock indefinitely, with the same stock.

It is a well known fact that even when fowls are bred from the purest strains, all the produce will not evidence equal purity with their parents as to the characteristics of that particular variety to which they belong; it will, therefore, be easily conceived how infinitely removed are the probabilities of obtaining such where the blood stock are only of tolerable character; and as regards the purchase of first-rate prize pens only, this arrangement is open to the very serious objection that by so doing, we have no change in blood, and the past experience of many a disappointed amateur has proved and doubtless the dearly-bought knowledge of others will yet confirm that the undeviating and inevitable consequences of such interbreeding will be imbecility, and deterioration of character, and partial blindness. These much-to-be-dreaded consequences are easily obviated by obtaining the males from one place and the pullets or hens from another; or they may be all obtained from a reliable breeder and specialist, who makes a specialty of breeding the kind or variety wanted, and upon request will match them for breeding purposes.

The ornamentals are generally the best of table birds, and the eggs richer in flavor than are those of common fowls. This is because of their nearer approach to the original stock. It is a well known fact that a large preference for wild birds or animals has long existed. Every departure from the original, whether in animals, birds or plants, detracts from its quality. The rich perfume of the rose garden of fifty years ago is now a fragrant memory only. There is little at the present day to recall it. Many instances may be cited in cases of both vegetables and animals, where the original taste and flavor have almost entirely departed. Potatoes especially have gained in size and appearance, while the quality has greatly deteriorated; but the 'possum retains his original flavor and daintiness. The many suppose that a chicken is a chicken, and an egg an egg, and that's an end of it"; not so, however; those gastronomes, the old Romans. According to Horace, the epicures were particular in the variety of their fowls cooked, or that produced their eggs, and even went so far as to distinguish between eggs that were supposed to produce males and females, as will be seen by the following lines:

"Long be your eggs, far better than round;
Cock eggs they are, more nourishing and sound."

The breeder of ornamental birds should aim, not for large quantities of eggs, especially during the winter, but for the finest specimens or types, of birds possible to produce. It is impossible to have both. No hen that has been made to lay constantly during the winter months can, in the spring, with constitution weakened and exhausted, give health, strength and vigor to a chick. Lacking these, the chick can never amount to much, tend and nourish him as you may.

I have much more to say, but this paper is already

too long. In a future article, next month, I propose to describe some of the ornamental breeds, and say something of my own success in producing some of the most perfect and beautiful specimens ever seen in Virginia. This fact is attested by numerous visitors to my yards. The latch-string to the front, or entrance gate, hangs on the outside (during the day), and the show continues throughout the year. Admission free.

B. J. PLEASANTS.

Ashland, Va.

PRODUCTION, PRICES, PROSPECTS, POINTERS.

Editor Southern Planter:

What is the matter with the American hen? She has given her owner more than the usual amount of trouble and disappointment within the past year. Last season very few choice chicks came on the market. No matter how we fed, the average man could not get his young stock in normally good condition. Prices ruled high, considering the quality of chicks offered.

Then in the fall the average pullet was slow in laying. This was true of all breeds, and under all conditions of care and feeding, so far as I could learn. It was as true in the experimental flocks on the Bureau of Animal Industry Farm, at Bethesda, Md., as elsewhere, and those in charge said no ration seemed to give the size in cockerels, nor the development in pullets which should be obtained in a favorable season.

The high price of eggs all winter, and the fact that normally low prices have not been reached this spring, tend to show that production for the past nine months, at least, has been below the normal.

The storage people in Washington usually get most of their stock at about fifteen cents per dozen. This season they tired of waiting, and some began buying at seventeen cents, with the result that the price advanced at once to eighteen, then to nineteen, and to-day, April 21st, good, fresh, clean stock, suitable for storage, is worth twenty cents per dozen, and nobody expects to see any more first class eggs at seventeen cents this season. It is freely predicted that this means high prices this fall, as the eggs stored at eighteen cents and above will hardly be offered at less than thirty cents at retail, and possibly not at that.

Now, if all the pullets lay early and persistently this coming fall and winter, the storage men who have saved us from very low prices this spring will hardly make reasonable profits on their investments. Still the trade is looking for a season of high prices, and the farmers ought to be ready to profit by it, and the only way to have pullets before Christmas is to keep them thriving every week from the day they are hatched.

While even the best managed flocks may sometimes fail to yield as they should, it is certain that the neglected flock is being kept at an even greater loss. The high prices of feed are likely to continue at least all summer and chicks, if kept in any number cannot be pushed along without some outlay. At the Maine Station they are satisfied if the cockerels at three months old will sell for enough to pay for their own feed, and that of the pullets up to that time. I believe their figures showed that with all purchased feed at New Eng-

land prices, it cost about sixty cents to bring a Plymouth Rock pullet up to full laying age. This indicates that a flock of good fall-laying pullets will cost some money, and are worth much more for practical purposes than the neighborhood price for a hen as it prevails in many places.

But another setback must be recorded. The information given at the Department, in Washington, is that the general fertility of eggs is low this season, that few people are getting good hatches, and nobody has found out why. My report of 150 eggs shipped to New England, which showed eighty per cent. of live germs after ten days in the machine, seemed to be among the best received. With fowls on free range, especially with those which did not lay heavily during the winter, I find little difference in fertility as between this year and last. The pullet flocks show as high as ninety per cent. fertile in some tests, and as low as eighty in others. Old hens' eggs are seldom as fertile with me as are the eggs of pullets. Eggs are also more fertile after green feed starts than before.

There is one kind of carelessness or ignorance which is responsible for many a poor hatch. This is in the selection of the eggs to be set. Our shipments of eggs for hatching this spring have run well into the thousands, and I think I am safe in saying that I have rejected as unsuitable for hatching fully one-third of all the eggs laid. An egg irregular in shape, or with a ribbed or wavy shell will seldom hatch. It is impossible to scrutinize the surface too closely for deformities of this kind. Sudden changes from cool to hot weather, especially if the hens are fat, seem to cause the shell material to be deposited unevenly on the egg. On some days fully half the eggs laid will show disqualifications for hatching purposes. I have examined a good many Leghorn eggs, and find the proportion of unfit is about the same as with my Barred Rocks. These rejected eggs include nearly all those of unusual size, and the rejected lots are just as saleable on the market as the others.

My neighbors who have hatched many early chicks have had unusually large losses. I expect to hatch many more in May than in April, and perhaps still more in June. I have little wheat saved from last year, and do not care to buy at present prices. The June chicks will cost notably less to raise than the April hatches. The very best report I have had from any of the Maine stock I have sold, was from a setting of eggs hatched last October, the pullets from which laid at five months, and one week old, and at less than six months they were weighing from five to five and one-half pounds. This is about the average size with me for good half-Maine pullets laying, but not one of my early hatched birds laid so young, and but few of my August and September hatches reached that weight in March.

„We again invite those who are willing to observe a few simple rules in shipping good chickens to the Washington market, to use the Blue Labels of the Southern Table Poultry Club, which I will be glad to furnish on receipt of request and postage. While we have not a large number of shippers, yet we think no shipment has failed to sell for the best price of the day in its

class. This, with honest and prompt returns, was about all we could expect for the first season.

W. A. SHERMAN.

Vienna, Va.

COMMON DISEASES OF CHICKENS, WITH SIMPLE REMEDIES—ROUP.

The roup, as it is generally designated, is probably the most widely prevalent disease common to our chickens; certainly the most fatal, both to the life of the fowls and to the profits of the flock. While it is not deemed necessary to give anything resembling a scientific analysis of the disease, or to attempt a differentiation of the forms in which it shows itself, as the majority of the cases classified as roup are not roup proper any more than a cold in a person is pneumonia or bronchitis, it is yet a sufficiently embracing term to meet the requirements which are so to describe the trouble as to permit of accurate treatment, and to give a simple, efficacious remedy.

Symptoms.—The disease commences as a cold in the head, best detected by visiting the house after the chickens have roosted, then the labored, wheezy breathing of the fowl will locate it. This impeded breathing will continue, without affecting the habits of the bird for some days, when the head commences to swell and the throat to become clogged with mucous. At this stage the disease is characteristic—the swollen eyes, covered with the yellow patches, the fevered condition of the bird, its drooping appearance caused by the blindness, are symptoms impossible to overlook. Without treatment death ensues in at least ninety per cent. of the cases—in those recovering, sequelae result that render the bird unprofitable. In the case of turkeys it has been my experience that it is almost impossible to raise poult; hatched from eggs of hens who have had the roup, while I have never had a chicken in which the disease has been allowed to run its course resume laying. Any cold attacking a chicken is most apt to develop into the roup with characteristics similar to those noted, and no case should be allowed to linger unattended to, so simple is the remedy.

Sources and Causes.—The primary cause is identical with that giving rise to colds in people—drafts, damp weather, crowded quarters, and as a cold in a chicken is so apt to develop into the roup or distemper, we should watch for the initial patient. The disease is both contagious and infectious. One diseased bird will rapidly impregnate the entire flock. This is done chiefly through the drinking water. The bird is fevered, and until blindness ensues, consumes abnormal quantities of water. At each visit to the water it scatters the germs both in the water and around the vessel.

As a chicken does not perspire, but throws off the major portion of its liquid excreta in the form of vapor, its breath during the progress of the disease is thoroughly impregnated with the germs, hence the necessity from another point of view of isolation.

Remedy.—Too frequently is it the habit of owners of chickens to kill at once all birds deemed suffering from roup, as the disease is by many regarded as incurable, and its contagious powers are well recognized. The

truth of the matter is that it is a disease, yielding, in any but the most advanced stages, extremely rapidly to a simple treatment. If one visits the house twice a week, after the birds have roosted, removes any found with the impeded breath, or other symptoms of the disease, pens them to themselves, and twice a day administers a teaspoon of the following mixture, roup will never develop in a flock.

Take two tablespoons of lard and melt it; add one tablespoon of ordinary coal-oil. Give the fowl one teaspoonful twice a day. Grease head with the mixture, if swelling has commenced. Keep the fowl isolated, and by watching the flock carefully, removing those attacked, the disease will be eradicated. At the same time give the flock, preferably in their water, the powder known as Venetian Red. I place a teaspoonful in each bucket of water. It serves as an admirable tonic, and apparently aids in preventing contagion through the water supply. I have had chickens recover even in the most advanced stages of the diseases when treated as above, one case, when the bird could not stand. As a rule, if swelling has not appeared one dose will suffice; if the head is swollen, keep the bird confined until the swelling disappears.

HORACE CAMPBELL.

Shenandoah Co., Va.

HENS vs. INCUBATOR.

Editor Southern Planter:

I enjoyed the article which appeared in your March issue from the pen of Mr. Husselman, but having had experience with both incubator and sitting hen, I cannot resist the temptation of "sassing" back a little. My first experience with an incubator was of recent date, and since I hatched out one whole chicken, I consider Mr. Husselman and his negative hatch entirely out of my class. Furthermore, it took only 130 eggs to produce my chick. Profiting by my first experience, I expect to do even better in my next hatch.

Regardless of first experiences, and with a knowledge of the successes of many friends with incubators, I take the stand that the incubator, when somewhat improved, should beat even the frazzle Mr. Husselman refers to. Who has not had exasperating experiences with sitting hens? Frequently they change their minds about sitting, and batches of eggs "a la frappe" result. I have often seen a hen leave her own eggs and, entering the nest of a neighbor, fight for a half interest in her setting, thus producing another batch of cold storage hen fruit plus several broken eggs. Eggs often roll from under the hen and become chilled before discovered. Occasionally an egg is mashed, or another hen does not turn it, and finally, while the chicks are hatching some are killed by the clumsy feet of the mother. Consider these facts, together with the assurance that lice are always a by-product of chicks hatched under hens, and I believe you will agree with me when I assert that in chicken hatching there is room for improvement on Mother Nature.

A. F. HODES.

District of Columbia.

WHY NOT OWN LAND IN VIRGINIA?

Editor Southern Planter:

One of the best ways to make money is to invest in Virginia land. Deep down in the nature of every properly constituted man is the desire to own some land. But the question is, where is the best land to be had at the lowest price? As a matter of fact, it is to be found in old Virginia. Hundreds and thousands of settlers now here, whose homes were formerly in the other States, Canada and the other countries abroad, appear to be satisfied. Once in a while a complaint is heard. But, if you were to put these complainers into an Eldorado, they would complain about something. There is no reason why this State should not become a garden of Eden. The wealth is in the ground and only needs the use of brains and willing hands to get it. Here is almost everything needed to ensure prosperity—fine timber, good clay for brick, good coal, plenty of good, soft water, cold and clear from springs everywhere; a good and kind soil that will grow almost all kinds of crops to perfection; the best climate and most healthy country in the world; the best markets at our door, and the most hospital and big-hearted people in the world. I have lived here among the people of old Virginia for the last eight years, and I am pleased to say that I like the old State, and can truthfully say that I have made more money farming here in Hanover county, Virginia, than I ever did in South Dakota.

Hanover Co., Va.

B. SMEEMAN.

Lack of organization has ever been a handicap to the farmer in these days of almost universal organization of common interests. In the nature of the case it is impossible for farmers to unite as merchants and manufacturers are accustomed to do, but one novel and helpful form of organization has been hit on that is well worthy of emulation. The members of the Illinois legislature who are interested in agriculture have formed the Legislative Agricultural Club, and have adopted a constitution and fixed upon a regular place of meeting, for the purpose of examining carefully and discussing thoroughly all bills which are introduced that affect the farmers. This beats the committees on agriculture by considerable. We are not acquainted with the present committees in the House and Senate, but we have seen committees on agriculture in legislative bodies which had much to learn in a practical and theoretical way about farming. It is safe to say that it is worth more to the author of a bill to have it reported out favorably from this Legislative Agricultural Club than from a legislative committee. With an organization of this kind on guard it is not likely that any statutes inimical to the interests of the farmer can be worked through the legislature. The idea is commended to the farmers in other state legislatures.—*Breeders' Gazette.*

If the farm horse is to make a long drive, the amount of feed should be reduced to one-half the usual amount. If more is to be required of the muscles, less can be done by the stomach, and it is always better to have the feed remain in the bag than to have the horse eat it if he is not able to digest it.

The Horse.

NOTES.

By W. J. CARTER ("Broad Rock").

The sale of trotting-bred and general purpose horses and Jersey cattle, owned by A. B. Lewis, at Lewisiana Farm, Fredericksburg, Va., took place on April 9th and 10th, and was well attended. Representative breeders and buyers gathered from more than a dozen different States.

The great herd of Jerseys, numbering about 150 head, and headed by the famous imported bull, Stockwell, attracted a notable collection of buyers, among them Dr. H. B. Rodman, of Shelbyville, Ky., who paid \$7,000 for the son of Oxford Lad and Golden Leda. Stockwell was purchased by Mr. Lewis at the Cooper sale in May, 1907, for \$11,500, a world's record auction price.

Some of the finest cows in the country were also included in the collection, for which prices ranged from \$1,500 down, while bidding was also very active on the young stock, though the latter were not in first-class condition. A three-months' old bull calf, by Stockwell, brought \$700, with proportionately high figures for other offerings.

A. Randolph Howard of Chatham, and Allandale Farms, Fredericksburg, Va., and Griffith and Saunders, of Acca Farm, Richmond, Va., obtained some of the best stock offered.

W. R. Spann, widely known as owner, breeder and exhibitor of Jerseys, who has directed affairs at Lewisiana Farm for a couple of years, returned to Texas after the sale, where he probably will locate, and establish a select herd of show cattle.

About forty head of draft and general purpose horses were sold during the forenoon of the second day, but lack of condition told, and prices ruled low. Later in the day the trotting bred horses and drivers were offered, and much better results obtained. Most of these, however, were both well bred and in nice shape for the sale ring.

Congressman H. D. Clayton, of Alabama, came down from Washington, D. C., and acting for himself and Senator J. W. Bailey, owner of the noted sire Prodigal, 2:16, bid on several of the best brood mares: Wyldewood, the two-year-old colt, by Admiral Dewey, 2:04 3-4, dam La Jolla, by Advertiser, 2:15, brought the top price of the sale at \$460, while A. Randolph Howard got a bargain in the elegant chestnut stallion Bow Axworthy, 2:22 1-4, at \$410, as did Floyd Brothers in the fine Bingen mare, Lisa W., for \$310.

List of best sales follows: Bow Axworthy, 2:22 1-4, chestnut horse, foaled 1899, by Axworthy, 2:15 1-2, dam Mystic, dam of Fred Kohl, 2:07 3-4, by Nutwood, \$600; A. Randolph Howard, Fredericksburg, Va., \$410.

Supremacy, 2:29, brown horse, foaled 1890, by Bell Boy, 2:19 1-4, dam Susan, by Alcantara, 2:23; R. C. Bedford, Fredericksburg, Va.

Comet Axworthy, black colt, foaled 1906, by Bow Ax-

worthy, dam Luella, by Electioneer; Captain R. Conway Vance, Fredericksburg, Va., \$225.

Kempton, black colt, foaled 1907, by Bow Axworthy, dam Luella, by Electioneer; B. N. Skinkle, Moss Neck, Va., \$350.

Kitty Kremlin, chestnut mare, foaled 1898, by Kremlin, 2:07 3-4, dam Edgewater Belle, dam of Edgemark, 2:16, by Edgewater, 12730; C. B. Conway, Corbin, Va., \$300.

Dora Dalmaine, chestnut filly, foaled 1906, by Bow Axworthy, dam Kitty Kremlin, by Kremlin; C. B. Conway, \$200.

La Jolla, gray mare, foaled 1894, by Advertiser, 2:15 1-4, dam Sally Benton, 2:17 3-4, by General Benton; H. D. Clayton, Washington, D. C.; \$200.

Telka, bay mare, foaled 899, by Arion, 2:07 3-4, dam La Jolla, by Advertiser, 2:15 1-4; Senator J. W. Bailey, Gainesville, Texas; \$400.

Lisa N., bay mare, foaled 1904, by Bingen, 2:06 1-4, dam La Jolla, by Advertiser; Floyd Brothers, Bridgetown, Va.; \$310.

Wyldewood, brown colt, foaled 1907, by Admiral Dewey, 2:04 3-4, dam La Jolla, by Advertiser; B. N. Skinkle, Port Royal, Va.; \$460.

La Jolla's Prince, gray colt, foaled 1908, by Bow Axworthy, dam La Jolla, by Advertiser; B. N. Skinkle; \$100.

Kremworthy, chestnut colt, foaled 1908, by Bow Axworthy, dam Kitty Kremlin; C. B. Conway, \$300.

A Randolph Howard, the Fredericksburg banker and horse show patron, secured one of the handsomest and fastest trotting stallions that has yet been owned in Virginia, at the Lewisiana Farm sale, in Bow Axworthy, 2:22 1-4, the chestnut horse, by Axworthy, 2:15 1-2, out of the great brood mare Mystic, dam of Fred Kohl, 2:07 3-4, and three others in the list, by Nutwood, 2:18 3-4. From the loins of Axworthy have come great trotters like Hamburg Belle, 2:04 3-4; General Watts, 3, 2:10 1-2; Tov Axworthy, 2:07; Guy Axworthy, 2:06 3-4, a Beau Brummel in appearance; Alta Axworthy, 3, 2:10 1-2, and a long list of others with slower records. Mystic, the dam of Bow Axworthy, is one of the best daughters of the renowned Nutwood, whose daughters lead all dams of brood mares, and her blood has bred on, as she figures as the great dam of Bisa, 2:27 3-4, and Binvolo, 3, 2:09 1-4, both of which trotted in 2:08 3-4 in races at three years old, and during the past winter were sold for prices right around the \$10,000 mark. Bisa is an elegant mare, and she is looked upon as one of the greatest trotting mares in training this season. Bow Axworthy joins the Allendale Farm stable of Mr. Howard, and his stud companions are Royal Swell, a horse of rare form and exquisite quality, by Bow Bells, 2:19 1-4, from Rachel, 2:08 1-4, the great producing daughter of Baron Wilkes, 2:18; Royal Seal, a blue ribbon winner, by Royal Swell, out of Nyanza, by Quartermaster, and The Prince Royal, a son of Royal Regent and Forest Maid, by the dead Jay Hawker, 2:14 3-4, one of the potent sons of the famous Jay Bird. While owned by Mr. Howard, Royal Regent, son of Bowbells and

Redmore, daughter of Red Wilkes, captured the championship for runabout show horses of American, but was emasculated after siring only a few foals. Royal Swell while owned by Walter Janvier, of New York, was mated with some high class mares, from which resulted the two four-year-old trotters now in E. D. Biter's stable at Readville, Mass, either of which can show miles around 2:16 last season.

Shetlands Are Making History Now.

The recent importation of Shetland ponies to Virginia by Dr. Nash P. Snead, of Cartersville, in Cumberland county, and other well known breeders of these midgets in this State, suggests mentioning some astonishing values that have been made in both Island and home-bred ponies this season. The miniature equines in their shaggy coats, with bushy manes and tails, have jumped into prominence of late, and, as prophesied long ago, leading exhibitors at the prominent horse shows are taking intense interest in the breed. Charles E. Bunn, the Illinois breeder, disposed of two wonderful midgets during the Chicago International Show to Alfred G. Vanderbilt, at phenomenally high figures, while at a recent sale at Alliance, O., a stallion bred at the Bunn Farm and called Irving, brought an even thousand dollars at auction, which establishes a record as being higher than anything heretofore obtained under the hammer in either Europe or America. Irving is the sire of one of Mr. Vanderbilt's pair, and grandsire of its mate. As to the value put upon choice mares, a two-year-old filly, a winner this year and last, has been purchased by a breeder at Glen Cove, L. I., for \$500, a price only equalled or exceeded but a few times in either America or England.

The first annual spring meeting of the newly organized Virginia Racing and Horse Show Association is attracting much attention, and promises to furnish a lot of good, healthy sport. The dates, Saturday, May 15th-Monday, the 17th, and Tuesday, the 18th, have been granted by the National Hunt and Steeplechase Association, and the meeting will be held at the mile track of the Virginia State Fair Association. The program includes six horse show features, with two steeplechases and two flat races each afternoon, while a detachment of U. S. Army officers from Washington, D. C., will also take part in special races offered for them, which will prove a most pleasing part of the meeting. The officers of the Association including James W. Graves, president; John Landstreet, vice-president; W. J. Carter, chairman Race Committee; John W. McComb, secretary, and Mark R. Lloyd, racing secretary, are all in high feather over the outlook.

Very satisfactory progress is being made in different departments of the forthcoming annual fair and race meeting of the Virginia State Fair Association, and the week of October 4-9 promises to be a gala one, here, as Richmond will be the Mecca of many thousands of out-of-town visitors, gathered in the capital of our grand old Commonwealth to take part in festivities in progress day and night. Of the many features pertaining to Virginia's big State Fair, one of the most attractive always to many is the speed program, which will include har-

ness and running races daily, with purses of sufficient size to attract some of the best horses in training. There will be two or more harness races, one steeplechase, and three flat races daily, with the program in charge of the Race Committee, made up of J. T. Anderson, Legh R. Page and W. J. Carter; while General Manager Mark R. Lloyd will look after details in general.

Jack Cook, 25504, the well known and handsome gray stallion, by General Wilkes, 2:21 3-4, from the great brood mare, Irene Fall, dam of John Agan, 2:05 1-4, and Maggie Lewis, 2:28 1-4, by Mambrino Abdallah, who was bred in Kentucky, and brought to Virginia by Dyer Brothers, of Roanoke, where he sired a number of good road and driving horses, and some trotters also, is now owned by Dr. Donald McPhail, of Randolph, in Charlotte county, who recently purchased the horse. Though mated with only an occasional mare of any breeding during the year she was kept at Roanoke, Jack Cook sired the good trotter, Jack Cook, 2:20 1-2, and another with no slower records. Dr. McPhail is one of the best known fanciers of the light harness horse in his section of the State, and by him the gray son of General Wilkes will be mated with some good mares.

Michael and Van Lear, of Waynesboro, Va., have purchased of J. E. Wingfield, Esmont, Albemarle county, the bay stallion Presque Isle, 2:29 1-4, by Norfolk, son of Nutwood; out of Mambrine, dam of Fanny Cox, 2:20, by Mambrino King. A horse of fine size, being sixteen hands high and weighing some 1,200 pounds or more, Presque Isle inherited both good looks and speed from both the Nutwood and Mambrino King Families, and being double gaited himself, a number of his get have made good combined saddle and harness horses. The paternity of Ephram Toodles, 2:18 1-4, one of the handsomest and fastest of Virginia bred trotting stallions, is shared by Presquillo with Toodles, Jr., as Baby Dean, the dam of Ephram Toodles, was bred to both horses the same season. Presque Isle, though well along in years, is vigorous and well preserved, and a very clever horse under the saddle, as well as in harness.



"Jubilee" and "Jolie"—daughters of Golden Lad—splendid matrons in the Allen Dale Herd, Shelbyville, Ky.

Miscellaneous.

KING CORN.

Mr. John Stewart Bryan, of the Times-Dispatch, Richmond, has initiated a movement for the raising of a great Prize Fund to be offered in connection with the Virginia State Fair for the best yields of corn raised in Virginia in 1909. It is hoped and expected that at least \$2,000 will be raised and be offered in a series of prizes. Up to the present time over \$1,000 have been promised. The Times-Dispatch has given \$100, the Southern Planter \$25, the Virginia-Carolina Chemical Co. \$100, and the rest has been contributed by other representative people of the State. We want to interest our subscribers in this movement both as contributors to the fund and as contestants for the premiums. Corn is the "King Crop" of the State of Virginia and yet we do not raise nearly sufficient to meet the requirements of the people of the State. The average yield per acre is far below what it ought to be and there are too few acres planted. Experiments have conclusively shown that our climatic conditions and our soil are specially adapted to the production of corn of the highest quality. Virginia grown corn always sells for the highest price on the market, and the cost of production per acre is below the average of the country. We have made crops of over one hundred and eighty bushels per acre and there is no reason why we should not exceed even this yield. South Carolina has made two hundred and fifty bushels per acre. We want to see Virginia beat South Carolina. She can do it if our farmers will only try. To accomplish this they must get busy at once. The offer of such a prize fund as \$2,000 should be a great stimulus to exertion, and we hope to see great competition in the contest. Even if one should not secure one of the prizes the production of a great crop at the price for which corn now sells and is likely to continue to sell will be a profitable business. We expect to publish a schedule of the prizes as soon as the same has been arranged by the State Fair Committee, and meanwhile would urge our subscribers to begin the preparation of the land and the planting of the crop. At least an acre should be planted and we hope to see the schedule so arranged as to offer prizes for the best yield on from one to twenty acres. Let us show the world that the Old Dominion can still stand at the head of the States in the production of the greatest staple crop of the country.

STEAM PLOWING AT WILTON-ON-THE-JAMES.

Through the courtesy of the Watt Plow Co., Richmond, Va., we recently had the pleasure of witnessing a trial of a steam-plowing outfit, sold by them to George P. Finnigan, of Wilton, near Richmond. The outfit consists of an 18 h. p. Huber steam tractor, made by the Huber Manufacturing Co., Marion O., and a four-bottom, eight-gang steel plow, made by the John Deere Plow Co., Moline, Ill. J. A. Rose, Harrisburg, Pa., eastern representative of Huber, and Fred. W. Whitman, of the Baltimore office of Deere, were on hand to "smooth out the kinks," which, however, did not materialize. The plow was hitched to the engine and a start was made

in a fifty-acre field. This field had been plowed in the same direction from time immemorial, and was badly ridged and furrowed. It was decided, therefore, to plow across these ridges with a view of getting the field level and in better condition. There was quite a little curios-



HUBER 18 H. P. TRACTION ENGINE.

ity as to how both engine and plow would behave under these conditions. The trial was most satisfactory in every respect. The engine rode the "billy" field with perfect ease, being at all times in easy control of the engineer and never stopped once except at his will. The plow was set to a depth of eight inches, and this was



THE DEERE PLOW AT WORK.

maintained throughout the day, the spectators applying the rule at frequent intervals. The eight gangs cut a furrow nine feet, four inches in width, as clean and pretty as ever one saw.

The outfit plowed about two acres per hour, harrowing it at the same time. A Clark cutaway harrow (40 discs) was simply hooked on to one of the gangs, thus completing the preparation of the land at one operation.

The field plowed was, in some respects, ideal both for engine and plow, as there were few, if any stones and no bad gullies, or hills. The fact was easily demonstrated that there are many thousand acres of land in the State on which the steam plow can be used profitably.

In construction, the Deere people seem to have about expended their ingenuity in getting up a thoroughly substantial plow. It is made of steel throughout, and the points and mold boards are soft-centered steel, which will outlast cast steel or chilled parts four or five times. They also appear to have solved the "hitch" problem.



THE OUTFIT ON THE ROAD.

They have provided for the widest range at all likely to be needed, both vertically and horizontally, the former running from two to twelve inches, and the latter about four feet—the entire width of the platform.

The Huber engine is of a pattern especially designed for farm work, and is declared by its makers to be the most economical one. It is steam controlled, and is equipped with all useful and modern appliances.

"Wilton" above mentioned, is one of the most noted places on the James River. The mansion was built in 1710, all material having been imported from England. It was the ancestral home of the Randolphs, who dispensed hospitality with a lavish hand in Colonial days. During the revolution, Cornwallis and his generals made it their headquarters. During the Civil War, it was equally as famous. Being situated immediately across the river from Drewry's Bluff, it was the scene of many a severe struggle. At that time, it was owned by the late Colonel William C. Knight, editor of the Southern Planter, who practically fed the Confederate Army, stationed at and around Richmond, from its fertile fields, and for which, by the way, he never received a dollar. Originally the estate comprised several thousand acres. At present there are 1,237 acres, 300 of which are James River low grounds, protected from overflows by a nat-

ural dyke, twenty to thirty feet high. Mr. Finnigan is draining, cleaning and clearing up the whole estate, and repairing the mansion, preparatory to establishing himself there as the head of a large breeding establishment and dairy.

In horses, Mr. Finnigan will breed Hackneys, Standard Breds and Thoroughbreds. The former stud is headed by Imp. Enthorpe Performer, Champion of England and America; also Starlight, Champion, under fifteen hands. Heading the Standard Bred Stud are Medio's Star and Medio. City Bank, a son of the mighty race horse and peerless sire, Meddler, heads the Thoroughbreds.

A large herd of Jerseys will be established later on, and milk, cream and breeding stock will be sold.

Mr. Finnigan has long been a dog fancier and breeder and will run large kennels in addition to the above. Pointers, Setters and Blood Hounds are his hobby, usually keeping as many as 400 dogs.

We hope to be able to report something more of "Wilton" later on.

IMPROVED HIGHWAYS FOR THE STATE.

The following article, by Westmoreland Davis, Esq., the President of the State Farmers' Institute, contributed to The Enterprise (Loudoun county), deals with the subject in a manner so pertinent and deserving of attention that we make no excuse for publishing the same. It so effectively disposes of the excuses made by so many for not pushing forward the good work of road building throughout the State that we cannot doubt but that its perusal and study will greatly help forward the good work which the Greater Highways Association is now energetically pushing through the campaign now being conducted by the Hon. C. T. Lassiter:

"The article upon roads and revenues, by Hon. F. M. Love, published in the last issue of The Enterprise, is entitled to consideration, not only because he is a good citizen, but because he is a member of the House of Delegates from this county. Mr. Love arrays himself upon the side of good roads, but to my mind his tone is so doubtful, and the inferences which are to be drawn from what he says are so misleading as to call for comment by those who feel deeply upon the subject.

It is quite possible that our present system of State taxation may be improved upon, and that a State board for the equalization of taxes, as paid by the several counties, would find a rich field for labor. It is also true that our present road law can probably be improved upon, and in an article prepared for the "Times-Dispatch" at the time of the recent holding of the Good Roads Convention at Richmond, and reproduced in The Enterprise of February 26th, I suggested that a commission be appointed by the next General Assembly to investigate the matter and to report a bill for passage that would the more perfectly suit our State and county needs.

It must be remembered, however, that in legislative enactments perfection from an individual standpoint is most difficult of attainment, and that in the ordinary affairs of life one must deal with conditions as they exist and not as one would have them.

In all matters of general State policy, the richer and

more densely populated communities must help the poorer and more sparsely settled districts.

The county of Pittsylvania, which is especially complained of, has its troubles. The principal product of that county, and indeed of Charlotte, Halifax and Henry, is tobacco, the price of which is practically dominated by a trust, and is also heavily taxed by the Federal Government. Without the fund derived from this tobacco tax the requirements of the Federal Government would fall much more heavily than now, through its system of indirect taxation, upon us all. So these counties too have their problems. It is also quite probable that a system of good roads in Pittsylvania will so aid in its development as to enable it to bear its full share of the public burdens.

After all we are Virginians, and in times of peace, as in times of war, we must share in all fairmindedness the burdens as well as the successes of life.

All legislation to be effective must be based upon the rule of the greatest good for the greatest number, and though upon occasion hardship may seemingly ensue, in the end satisfactory results are obtained. For instance, I enjoy no immediate benefit from the public schools save that derived by my employe'es, whom I regard as my friends, and in whose welfare I hold an abiding interest, and yet I pay the school tax most cheerfully, satisfied that the public school system is the very sheet anchor of our public polity.

Man in his primitive state was ignorant, prejudiced and without the means and appliances necessary to his happiness and comfort.

Every step that has been taken in his social and in his moral development has been at the sacrifice of his preconceived opinions, and under the leadership of those, at first opposed, oftentimes derided, but finally acclaimed the benefactors of the race.

The introduction of Christianity, despite its manifold blessings to mankind, met with the bitterest and most cruel persecution. Labor-saving machinery, which has added untold opportunities and comforts to the world of labor, caused, until understood and appreciated, in its introduction, riot, and threatened revolution. The public school system had in its earlier days its bitter opponents among those who foresaw a depleted treasury; and the good roads movement will triumph over all opposition, not because of individual support, but because of its real merit.

Poverty in the world is omnipresent. Legislation cannot eradicate, but wise laws can only tend to its amelioration.

Every step in the march of progress tends to better the condition of the less favored financially of our citizens.

Within the memory of the writer our State has been much retarded in the development of her industries and resources by a constant cry of poverty, raised by the unthinking or the designing, but which effectually stemmed the incoming tide of progress.

This cry of poverty rendered possible the dark days of what I may term "Masseyism" in the State; it caused the sale, for a song, of the States holdings in the A. M. & O. R. R., now the flourishing Norfolk & Western R. R.,

and it was responsible for that blunder of blunders—the abandonment to a corporate interest of the James River and Kanawha Canal, which, reaching out from Tidewater, had all but penetrated the rich coal fields of West Virginia.

This canal was and would have been in increasing ratio an inestimable boon to the farmer of the James River valley, and to the Virginian manufacturer. All these were thrown away because of an unthinking cry of poverty.

Virginia is not poor! Loudoun county is not poor! Happily for us, both are rich. Last year the State had a million of dollars of surplus in her treasury.

Loudoun county is one of the banner counties of the State.

Her bank statements show it. The two banks in Leesburg with a population of some two thousand have together individual deposits of about \$1,500,000. The banks, at Purcellville, Round Hill and Upperville tell a similar tale of prosperity. These deposits are not the hoardings of the ultra rich, but are the accumulations of our enterprising, energetic farmers.

If any people in the world are entitled to good highways, these people of Loudoun are. They demand the best of everything else; why, then, deter them from having something they need, and that every other community in the country is settling itself to secure.

The powers of destruction, though sung by bard and recorded by poet, perish; those of construction remain to brighten the life of man. Had Caesar and Napoleon done naught but build the roads attributed to them, their names would have been immortalized by grateful peoples.

Mr. Love's sympathetic picture of the foreign peasant, seeking the byways, whilst haughty nobles, with pomp and circumstance, appropriate the highways, might be very interesting but for one thing—the condition, so far as my personal observation goes, does not exist.

The best system of highways in the world is that of France.

With the battle of Sedan and the consequent fall of the Second Empire, all class distinctions in France ceased. All there, as in America, are equal before the law. Just what Mr. Love's opportunities for study of the conditions in Europe are, of course, I do not know; but I judge that his notions upon the subject are derived from political speeches, with which our people are regaled, made by those who, seeking to array labor against capital, make invidious and erroneous comparisons between conditions in Europe and in America.

It is true that the French laborer receives less for his work, but this is compensated for by the greater purchasing power of his money in that country.

The fact is that the French peasant and small farmer constitute the happiest, thriftiest and most patriotic class in the world, and the power of their aggregate wealth makes the French the bankers of the world, and the financial arbiters of the peace of Europe.

These people love their pretty homes and their beautiful country, and nothing adds more to their comfort and prosperity than their system of good roads.

Far more apt would have been Mr. Love's illustration had he pictured the real suffering of our little children

on their way to school, jumping from stone to stone, and cutting across muddy, plowed fields that they may avoid highways, not indeed selfishly occupied by automobilists, and the rich, but so deep in clinging mud that it takes six-horse teams to do the work, which should be done by pairs of horses when traversing them.

These highways are in bad weather worse than the trails of our forefathers because, cut deep by constant traffic, in winter they are not susceptible of improvement.

After all the question is purely a business one to be settled upon business lines.

Our farmers expend periodically large sums in liming and heavily fertilizing their lands in order that succeeding crops may be bettered, and expensive labor bills for tillage may be decreased. The same policy calls for good roads. The teams will do more work in hauling heavier loads; and the wagons and machinery suffer less wear and tear, while life from a social standpoint will be greatly benefitted.

The Virginians are the best people in the world. The only trouble is that there are not enough of them to assure their prosperity in the vast territory which constitutes our State. We need good settlers.

The Commonwealth expends annually vast sums for the higher education of our youth, only to have them betake themselves to the cities and towns of the country. This is a distinct loss to State and county. We owe it to our State, to our youth, to ourselves to make life in the country more possible and attractive; and when this is done many more of our country boys will be content with home life, and saved from that grim monster, the city, with its grind of work, its ill health, dissipation and oftentimes untimely end.

No one means will so surely secure these much desired ends as will a system of good roads.

Again, with the advent of railways, towns once prosperous, but off the line, sank into comparative obscurity. To them good roads mean a renewal of their former prosperity. This is no dictum of mine. It is in evidence in Europe, in New York, New England, New Jersey, indeed, wherever good roads obtain; and as the system is extended prosperity follows quickly along.

No doubt, our next legislature, as has each of its predecessors, will be assailed by special interests seeking special privileges.

Unfortunately, this will be no new condition. Our interests, however, can be safeguarded by sending men of character and brains to Richmond. Such men will not only curb but defeat special or other pernicious legislation that may be proposed.

We in Loudoun are confronted with a "condition, not a theory." We have a "road law" recently enacted by an intelligent General Assembly, having bi-ennial sessions. Let us, with the other counties of the State, set to work under it, until a better law, if possible, is offered.

To wait, hoping that our individual opinions will be met, will only mean disappointment in the end, and an indefinite postponement of our plans.

For my part, I am opposed to extravagance of any kind; personal, communal or State, but I feel that the moral, social and commercial interests of our country require our activity in this good roads movement.

I am but a private in the ranks. There are officers of the Good Roads Association of this State among us, who will no doubt set to work in the matter.

The time will assuredly come when Federal, State, city and county interests will harmonize upon a great and comprehensive scheme. Such plans, however, are formulated slowly.

Meanwhile, the State of Virginia needs good roads, and the county of Loudoun is suffering for them. We should, therefore, be up and doing, lest wealthy and hitherto progressive Loudoun serve, for other communities, "to point a moral, and adorn a tale" of public apathy upon a vital, pressing problem.

All advocates of good roads will expectantly await the promised publication of Mr. Love's plan. If it prove a feasible, practical and comprehensive solution of the problem, I am sure it will receive the applause and support of all good citizens.

I fear, however, that he has addressed himself to the ancient task of "making bricks without straw," a task, that confounded even the patient and long suffering Israelites of old.

WESTMORELAND DAVIS.

Morven Park, Leesburg, Va.

VIRGINIA BERKSHIRE BREEDERS MEET.

A meeting of the officers and directors of the Virginia Berkshire Association was held in Richmond on April 21st, at which meeting many points of interest to the Association, and to the breeders of Berkshire hogs of the State was discussed.

It was decided that if proper arrangements could be made with the State Farmers' Institute, to hold the annual meeting of the Berkshire Association in conjunction with the Farmers' Institute, and also to have an auction sale of Berkshire hogs in connection with the meeting.

An effort to get better express rates for pure bred stock to be used for breeding purposes was also determined upon.

The exhibition of hogs at the Fair was discussed, and the following offer of the American Berkshire Association accepted, and the \$15.00 for second and third prize guaranteed.

The American Berkshire Association, for the purpose of encouraging breeders generally to exhibit their herds at the State Fairs of 1909, offers a Solid Silver Cup (value fifty dollars), to the owner of the best herd of Berkshires, consisting of a boar and three sows under one year old, at each State Fair that provides a separate classification for Berkshires. Animals farrowed after September 1, 1908, will be considered eligible to compete for the prize.

The Trophy of the American Berkshire Association will be offered at every State Fair where the State Berkshire Association provides a second prize of \$10.00 and a third prize of \$5.00 for the exhibitors' herd referred to above.

Conditions.

First.—Upon the acceptance of this offer by the State Association, the announcement can be made, but there shall be filed with the Secretary of the American Berkshire Association a check for \$15.00 to cover second and their prizes, at least ten days before the opening of the Fair.

Second.—That the boars and sows competing for the

above prizes must be registered in the Record of this Association at time of entry, and there must be three or more competitors. Exhibitors must produce for the examination of the Superintendent of the Swine Department of the Fair, a certificate of ownership from the American Berkshire Association, showing that each animal has been owned by him at least ten days before the opening of the Fair at which shown.

Third.—That the animals competing for the above premiums must be owned by an exhibitor of the State in which the Fair is held, and no animal will be entitled to compete in more than one State for the American Berkshire Association Trophy.

Fourth.—That the entries for the premiums herein offered must be made with the Secretary of the American Berkshire Association at least ten days prior to the opening of the Fair.

Fifth.—The awarding of the above prizes shall be made by the regular Judge in the Berkshire classes, or some one selected by the Fair Association, and certified to the American Berkshire Association by the Secretary of the Fair Association.

Sixth.—Upon receipt of the certificate of award, the Trophy will be suitably engraved and shipped to the successful exhibitor, and the checks covering second and third prizes will be sent to the other successful contestants.

Seventh.—Reports of awards must be filed for the above prizes with the Secretary of the American Berkshire Association, at Springfield, Ill., prior to December 31, 1909."

The attention of all Berkshire breeders is especially called to these prizes, and they are strongly urged to compete for this trophy, as it is well worth having. It should also be understood that the hogs competing for this prize can compete for the prizes offered by the Fair.

All Berkshire breeders of the State are cordially invited to join the Virginia Association, and to send in their initiation fee of \$1.00 to the Treasurer, Mr. W. R. Fensom, Richmond, Virginia.

The officers of the Association are: President, Dr. E. W. Magruder, Richmond; Secretary, Mr. E. L. Ross, Bedford City; Treasurer, Mr. W. R. Fensom, Richmond. These, with Dr. D. M. Trice, Charlottesville; Mr. E. F. Sommers, Somerset, and Mr. W. A. Willeroy, Romancoke, from the Board of Directors.

FARM OPERATIONS AT MONTICELLO IN THE YEAR 1796.

Editor Southern Planter:

The Duke of La Rochefoucauld Laincourt, who was in this country from 1795 to 1797, and published a book of travels in America, was a careful student of agriculture and familiar with the best practice of that time. In the summer of 1796 he visited Monticello. The method generally followed in that neighborhood (1796) was to clear a tract of land and raise tobacco on it four or five years in succession and then let it lie indefinitely; or, if tobacco was unprofitable, to raise wheat and then corn, followed by wheat and corn, and then a recuperative fallow as with tobacco. The following is the account given of Mr. Jefferson's procedure:

He has divided all his land under culture into four farms, and every farm into seven fields of forty acres. Each farm consists, therefore, of two hundred and eighty acres. His system of rotation embraces seven years, and this is the reason why each farm has been divided into seven fields. In the first of these seven years wheat is cultivated; in the second, Indian corn; in the third, peas or potatoes; in the fourth, vetches; in the fifth, wheat, and in the sixth and seventh, clover. Thus each of his fields yields some produce every year, and his rotation of successive culture, while it prepares the soil for the following crop, increases its produce. The abundance of clover, potatoes, peas, etc., will enable him to keep sufficient cattle for manuring his land, which at present receives hardly any dung at all, independently of the great profit which he will in future derive from the sale of his cattle. Each farm, under the direction of a particular steward or bailiff, is cultivated by four negroes, four negresses, four oxen, and four horses.

Mr. Jefferson rates the average produce of an acre of land, in the present state of his farm, at eight bushels of wheat, eighteen bushels of Indian corn, and twenty hundred-weight of clover. After the land has been duly manured, he may expect a produce twice, nay, three times more considerable. But his land will never be dunged as much as in Europe. Black cattle and pigs, which in our country are either constantly kept on the farm or at least return thither every evening, and whose dung is carefully gathered and preserved either separate or mixed, according to circumstances, are here left grazing in the woods the whole year round. Mr. Jefferson keeps no more sheep than are necessary for the consumption of his own table. He cuts his clover but twice each season, and does not suffer his cattle to graze in his fields. The quantity of his manure is therefore in proportion to the number of cattle which he can keep with his own fodder, and which he intends to buy at the beginning of winter to sell them again in the spring.

From an opinion entertained by Mr. Jefferson, that the heat of the sun destroys or at least dries up in a great measure the nutritious juices of the earth, he judges it necessary that it should always be covered. In order, therefore, to preserve his fields as well as to multiply their produce, they never lie fallow. On the same principle he cuts his clover but twice a season, does not let the cattle feed on the grass, nor encloses his fields, which are merely divided by a single row of peach trees. His system is entirely confined to himself; it is censured by some of his neighbors, who are also employed in improving their culture with ability and skill, but he adheres to it, and thinks it is founded on just observations.

Mr. Jefferson sold his wheat last year for two dollars and a half per bushel. He contends that it is in this district whiter than in the environs of Richmond, and all other low countries, and that the bushel which weighs there only from fifty-five to fifty-eight pounds weighs on his farm from sixty to sixty-five.

Prince Edward Co., Va.

A. J. MORRISON.

THE
Southern Planter

PUBLISHED BY
THE SOUTHERN PLANTER PUBLISHING CO.,
RICHMOND, VA.
ISSUED ON 1ST OF EACH MONTH.

J. F. JACKSON,
Editor.

B. MORGAN SHEPHERD,
Business Manager.

B. W. RHOADS,
Western Representative, 844 Tribune
Building, Chicago, Ill.

MANCHESTER OFFICE,
W. J. Carter, 1102 Hull Street.

ADVERTISING RATES
Will be furnished on application.

The SOUTHERN PLANTER is mailed to subscribers in the United States, Mexico and island possessions at 50 cents per annum; all foreign countries, \$1; the city of Richmond and Canada, 75 cents.

REMITTANCES should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.

SUBSCRIBERS failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.

WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. Rejected matter will be returned on receipt of postage.

No anonymous communications or enquiries will receive attention.

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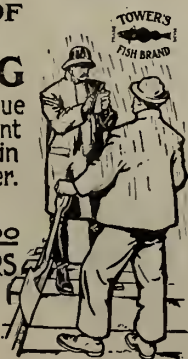
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PUBLISHERS' NOTES.
TO ADVERTISERS.

Please bear in mind that we must have all copy or instructions for advertisements by the 25th of each month without fail. Every month we are compelled to omit advertising in large volumes for the simple reason that copy does not reach us in time.

A NEAT BINDER.

If you will send thirty cents to our business office, we will send you a neat binder made of substantial Bristol board, in which you can preserve an entire volume of the Southern Planter. Many of our readers find this a useful device, as they always save their copies for reference.

WITH THE ADVERTISERS.

The Waterloo Gas Engine Co. resumes its advertising this month.

The Century Mfg. Co has a buggy announcement on another page which will interest our readers.

The Knight Mfg. Co. is advertising its well-known saw-mill machinery this month.

The Aermotor Co. has a striking announcement on the second cover page.

The Aultman & Taylor Machinery Co. is advertising its threshers, engines, and saw-mills this month. W. K. Bache, Richmond, Va., is their Virginia Sales Agent.

Allandale Farm, Fredericksburg, Va., announces a season for Bow Ax-worthy.

The South Side Mfg. Co. is advertising fruit and truck baskets and carriers.

David Wallerstein & Co. announce that they are in the market for large quantities of wool.

A splendid sale of Hereford cattle is advertised by W. B. Duke, Rider, Md.

Percheron horses are offered by the Birdwood Stock Farm. Look up their advertisement

Hackneys are offered by the noted Aldie Stud and Stock Farms.

Basic Slag is advertised by the Coe-Mortimer Co.

Robert R. Smith will have his usual public sale this month at his farm near Rippon, W. Va., close to the Virginia line.

H. C. Lester is advertising a fine line of Jacks.

Attention is invited to the advertisement of E. W. Adams, in which he offers an excellent farm gate.

PLANT WOOD'S SEEDS
For Superior Crops.

Soja Beans.

The most nutritious forage and feed crop that can be grown, containing, to a greater extent than other crops, protein, or fat-forming qualities.

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in raising poultry, live stock, produce, fruit, honey, or other farm products? If so, send ten cents for a 3-months' trial subscription to the "RURAL FARMER."

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The reason is it delivers the full capacity of the cylinder both on the DOWN-stroke and the UP-stroke making it actually double capacity. There's a revelation to pump users in our new Deep Well Pump Catalog.

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Real Factory Prices Save You 20% to 50%
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good cultivation is absolutely necessary, but it can't be done with poor tools. Here's an Iron Age Tool especially made for garden work. It not only does good work, but it is easy to operate. The boys and girls can do the gardening and produce big crops, if you'll equip them with Iron Age Tools. Send to day for our Free catalog.

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Only One of Many Iron Age Tools

IRON AGE

No. 1 Double or Single Wheel Hoe

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HOW SOUTHERN UPLANDS HAVE SUFFERED FROM SOIL EROSION.

A yearly loss of many million dollars which need never take place; a loss, not of one year, like that occasioned by a great fire, but one which has occurred year after year without interruption for decades; which in its aggregate, since the Civil War, nearly equals the national debt—this is the toll yearly exacted by erosion from the farm soils of the upland South.

The profits of the farmer noiselessly flow from his sloping fields in muddy streams. In spite of the large amount of loss the tiller almost ignores it; he is, in fact, frequently ignorant of it. Yet this immense loss to the farmer represents only a portion of the actual damage; other industries suffer directly and indirectly from the same cause. On account of it there are in the dissected upland regions of the South more than 5,000,000 acres of land at one time cultivated and now idle. Many reasons have been assigned; the reduced fertility of the soils; the lure of the newer, more level, and more easily tilled lands of the West; economic changes which followed the Civil War; lack of labor and home markets. These have been secondary factors. Soil exhaustion and erosion are the fundamental causes. The exhausted "old fields," eroded, gullied, raw with deep wounds, and red as though stained with carnage, need only the touch of knowledge to become revived.

The causes which produced the old fields still operate to the ruin of much of the farming land. The decrease in the productivity of the farms of the Eastern United States has been general. Nowhere has it been so evident as in the upland region of the South, where the loss is certainly not less than thirty per cent. of the yield when the lands were fresh and new. Erosion is the basal problem which underlies soil exhaustion in this region, and so prevalent and so disastrous is it that it has become not only a serious local agricultural problem, but an important national problem as well, seriously affecting the value of many investments which have been made in the region. Its enormous extent has not been due entirely to poor cultural methods. The heavy rainfall, the physical characteristics of the region, the broken topography and the close-textured soils, and, in some measure, also the economic conditions have contributed to increase it. Where methods of cultivation suited to the local conditions have been used, not only has erosion decreased, but the yields have responded in a wonderful manner, indicating that the soils are not only



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is the only low down spreader, easy to load. Handles all manure, pulverizes thoroughly, spreads evenly, thick or thin, as wanted. Right width to straddle corn rows. Solid bottom box, scraped clean every load. Automatic drag return, safety end-rate, double drive. Send for catalog L and know every reason why you should own a Miller modern spreader.

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Most liberal offer ever made on first class roofing. Better than goods that sell at much higher prices. Don't spend a dollar on roofing until you have seen


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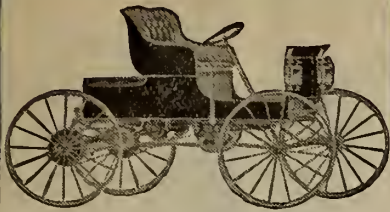
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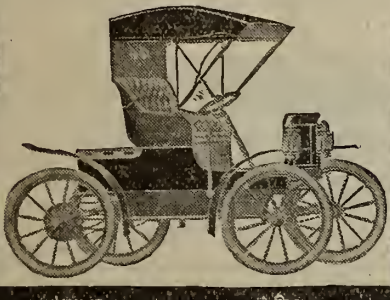
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WHEELS, FREIGHT PAID \$8.75 for 4 Buggy Wheels, Steel Tires. With Rubber Tires, \$15.25. 1 mfg. wheels 1/2 to 4 in. tread. Buggy Tops \$5.00, Shafts \$2.00. Top Buggies \$13; Harness, \$5. Learn how to buy direct. Catalogue Free. Repair Wheels, \$5.00. Wagon Umbrella FREE. V 8008, Gladwell, O.

not inferior to those of other sections, but that on account of the ample rainfall and the long growing season they have many distinct advantages over those of other humid parts of the country.—From "The Waste from Soil Erosion in the South," by W. W. Ashe, in the American Review of Reviews for April.

A CASE WORTH TRYING.
 Mr. F. Philander Towersby, a most excellent citizen, though not noted for lavish prodigality, received recently a consignment of very rare Tokayer Ausbruch. He sent one bottle of the delicious wine to Justice Fordyce of the Supreme Court, who happens to be one of the most eminent connoisseurs in America, and with the bottle sent a note asking his Honor's opinion of the vintage.

Mr. Towersby received next day this reply:
 "My dear Sir:—I beg to thank you for the confidence you repose in my judgment as shown by asking for my opinion.

"But, inasmuch as I am a lawyer, many years of training and experience make it impossible for me to give an opinion on anything but a case."—Harper's Weekly.

DAIRY AND FOOD COMMISSION. Rules and Regulations.

Effective on and After This Date, Adopted by the Dairy and Food Commissioner and Approved by the Commissioner and Board of Agriculture and Immigration, Providing for the Sanitation of Bakeries, Confectioneries, Canneries, Packing Houses, Slaughter Houses, Dairies, Creameries, Cheese Factories, Restaurants, Hotels, Groceries, Meat Markets, or Other Places Used in the Manufacture, Packing, Storage, Sale or Distribution of Food or Food Products, Governing the Sale or Distribution of Oleomargarine and Substitutes for Pure Butter.

(1) Every building, room, basement or cellar occupied or used as a Bakery, Confectionery, Cannery, Packing House, Slaughter House, Dairy, Creamery, Cheese Factory, Restaurant, Hotel, Grocery, Meat Market or other place or apartment used for the preparation for sale, manufacture, packing, storage, sale or distribution of any food or food products, shall be properly lighted, drained, plumbed and ventilated, and conducted with due regard for the purity and wholesomeness of the food therein produced, and with strict regard to the influence of such conditions upon the health of the operatives, employees, clerks or other persons therein employed. The term "Food" as herein used shall include all articles used for food, drink, confectionery or condiment, whether simple, mixed or compound, and all substances or ingredients used in the preparation thereof.

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(2) The floors, sidewalls, ceilings, furniture, receptacles, implements and machinery of every establishment where food is manufactured, packed, stored, sold or distributed, shall at all times be kept in a clean, healthful condition.

(3) Food in the process of manufacture, preparation, packing, storing, sale or distribution must be securely protected from flies, dust, dirt and as far as may be necessary, from all other foreign or injurious contamination.

(4) All refuse, dirt and the waste products subject to decomposition and fermentation incident to the manufacture, preparation, packing, storing, selling and distributing of food, must be removed from the premises daily.

(5) All trucks, trays, boxes, baskets, buckets and other receptacles, chutes, platforms, racks, tables, shelves, and all knives, saws, cleavers and other utensils and machinery used in moving, handling, cutting, chopping, mixing, canning and all other processes must be thoroughly cleaned daily.

(6) The clothing of operatives, employees, clerks or other persons must be clean. It is suggested that employees in bakeries, confectioneries, packing houses, slaughter houses, dairies, creameries, cheese factories and meat markets, be attired, as far as possible, in clean, white suits or overalls.

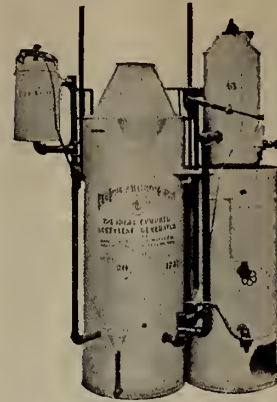
(7) The side walls and ceilings of every bakery, confectionery, creamery, cheese factory, hotel and restaurant kitchen, shall be well plastered, wainscoted or ceiled, preferably with metal or lumber, and shall be kept oil painted or well lime washed, and all interior woodwork in every bakery, confectionery, creamery, cheese factory, hotel and restaurant kitchen shall be kept washed and clean with soap and water; and every building, room, basement or cellar occupied or used for the preparation, manufacture, packing, storage, sale or distribution of food, shall have an impermeable floor made of cement or tile, laid in cement, brick, wood or other suitable non-absorbent material which can be flushed and washed clean with water.

(8) The doors, windows and other openings of every food-producing or distributing establishment during the fly season, shall be fitted with self-closing screen doors and wire window screens of not coarser than 14-mesh wire gauze.

(9) The sleeping place or places for persons employed in such establishments shall be separate and apart from the room in which food products are manufactured or stored, and no person shall sleep in any place where flour, meal or the manufactured products thereof are manufactured or stored.

(10) No domestic animals except cats shall be permitted to remain in

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Be able to tell your blue dress from black. See while you are trying, without straining the eyes. No smoke, no globes to break or lamps to clean, or fall or explode; no danger of killing you while you sleep. Less work per month than one lamp. Costs less than Kerosene, and always ready at all times. We will send you one ready to put up. Write us to-day.

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Before you contract or buy write for our proposition



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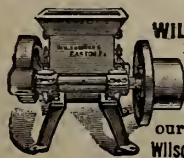
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LOUIS DE LACROIX, Oxford, N. C.

any room used for the manufacture or storage of food products.

(11) No employer shall knowingly permit, require or suffer any person to work in a bakery, confectionery, cheese factory, dairy, creamery, hotel or restaurant kitchen who is afflicted with any contagious or infectious disease, or with any skin disease.

(12) Cuspidors shall be provided by the owner or operator for each workroom of every bakery, confectionery or other food-producing establishments, and no employee or other person shall expectorate on the floors or side walls of any such bakery, confectionery, creamery or other food-producing establishment. Plain notice forbidding such expectation shall be posted in every such place.

Smoking in workrooms of food-producing establishments is inhibited.

(13) Every bakery and confectionery shall be provided with a convenient washroom and toilet of sanitary construction, but such toilet shall be entirely separate and apart from any room used for the manufacture or storage of food products.

(14) Delivery wagons used in the delivery of products of bakeries and confectioneries shall be covered wagons, closed at both ends.

(15) Delivery wagons used to transport or deliver meats or meat products must be provided with tarpaulins of sufficient size to cover the entire body of wagon when loaded, and the tarpaulins shall be carefully spread over loads of meats, and meat products unprotected by boxes or casings when in transit through the streets of the cities and towns of the State.

THE EDITOR AND THE MICROBE.

An editor sits at his desk and scrawls,

Searching the ceiling and surveying the walls,

Had nibbled the holder that his lips did engage,

Extracting blue smoke from its dark wooden cage.

A microbe, ignoring the roof on its way,

Lit on his desk, and thus did it say: "You see I'm a robe, or rather, you don't

For, not gifted with features, I no vision evoke,

I've just come to tell you I don't care a fig

For all the spray calendars that you may rig,

Your salt and your sulphur, your green and your lime

May hinder me some, but my life is feline;

My spatter, it's true, destruction brings in,

For one age is let out that the next may get in.

Grapes grow not on thorns; wine no longer tickles.

Then why should I spare the outcast of vittles

SHIP ME YOUR OLD METALS

HIDES

RUBBER

SCRAP IRON

Car Lots a Specialty

50,000 Hides Wanted

Write for Prices.
Satisfaction Guaranteed.
No Commissions.

CHECKS SENT SAME DAY FREIGHT BILLS ARE MARKED PAID.

Clarence Cosby,

Established 1890.

RICHMOND, VA.

LARGEST DEALER IN Scrap Iron, Metals, Hides, Etc., in the South.

REFERENCES:

National Bank of Virginia,
Bank of Richmond,
Bradstreets and Dun.



Crestline "SUNSHINE" Sprayer

Fig. 825 with Anto Agitator and Two Spray Leads.

This Pump of Quality is used Throughout THE SOUTH.

Seldom do you purchase a sprayer. When you do buy see that you purchase quality and merit as well as appearance. We put the material into the pump. Heavy Brass and Iron and build it so anyone can repair it. Spraying is a necessity. So is a good pump a necessity. Ask about our "Sunshine" Pump. Free circular and price to anyone interested. Address

THE CRESTLINE MFG. CO.,
Pumps—Sinks—Hose. Crestline, O

LEGGETT'S DUSTER

Distributes Insecticides In dust form
NO WATER TO HAUL.



LEGGETT'S CHAMPION DUSTER

The Champion and Little Giant dust potatoes and tobacco as fast as you walk. These are the well-known Tobacco Dusting Machines THE BEETLE Potato Duster (Horse Power) Dusts Four Rows.

Our illustrated Spray Calendar, giving concise information regarding Dusters and address of nearest dealer, mailed on request.

LEGGETT & BRO., 301 Pearl St, N Y.

DEFENDER SPRAYER



Easiest Working most powerful Brass Spray Pump, Automatic mixer, Brass expansion valves and double Strainer.

Write for illustrated circulars. Agents wanted. J. F. GAYLORD, Box 82, Catskill, N. Y.

FUMA

kills Prairie Dogs, Woodchucks, Gophers and Grain Insects. "The wheels of the Gods grind slow, but exceedingly small." So the weevil, but you can stop their grind with

FUMA CARBON BI-SULPHIDE as others are doing. It fumigates poultry houses and kills hen lice. Edward R. Taylor, Penn Yan, N. Y.

I dropped on this sphere whilst heaving a sigh!
Ozone is my ration; my roost is the sky,
Dubbed as a pest in your Eabel vocabulary,
Tho' I act as an agent in Nature's great laboratory."
Then, saying "so long," solemn silence did follow,
Till the Editor gasped: "Beats cock fighting hollow."
W. M.

PUTTING HIS ROOFING ON RIGHT.
Farmer Sow Does the Job Himself.
If you have any buildings on your place that have old or leaky roofs, the thing to do is to write at once to some reputable manufacturer for his estimates, samples and prices on prepared roofing. The Breese Brothers Company, who make the well-known "BB" roofing, make a specialty of answering all such inquiries and furnish everything needed in case the writer decides to use "BB" roofing. They tell just how to lay gutters, flashings, pitched roofs, flat roofs, and how to measure your buildings so as not to waste any roofing material. Each roll of "BB" roofing contains cement, special nails and all directions for a simple, neat job.



Before you make any deal to roof your buildings or sheds, suppose you drop a line to the Breese Brothers Co. (Roofing Department 64), Cincinnati, Ohio, and get the details of their proposition. This doesn't cost you anything but a penny postal and it may save you both money and trouble in getting the right kind of a roof. Be sure to write for free samples of their roofing to test and for their special offer schedule.

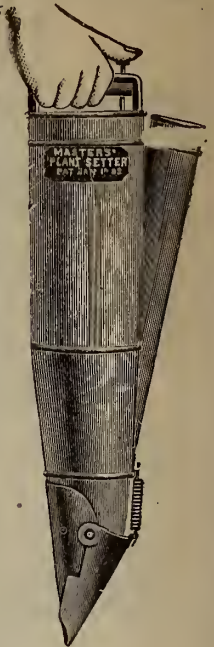
Write to Breese Brothers Co. about roofing at once, and we assure you your questions will be promptly and politely answered.

THE AUTO-BUGGY IN CITY AND COUNTRY.

I couldn't help stopping to watch it as it flew down Michigan avenue. Just an auto-buggy such as you can buy for seven or eight hundred dollars—and passing to and fro were big cars that cost thousands—but it made me think about the wonderful bigness of the motor buggy proposition.

Here on the velvety, unbroken boulevard this high wheel, solid tire, engine-driven buggy was serving its owner as well as the highest priced car could possibly serve him. It was

If you are looking for the Grandest Little Tool ever used or ever seen for Setting Plants Here it is



The universal testimony of men who have used this Transplanter for two or three seasons is that the longer they use our Planter the better they like it,
Write to day for full particulars.

to
MASTERS PLANTER CO.
178 S. Water St
CHICAGO, ILL.

FARM USES

of CARBOLINEUM are completely explained in BULLETIN 26 covering Kinds and Habits of Lice—The care of Silos, Preservative treatment of Shingles and Fence posts and the care of Fruit and Shade Trees. Mailed free upon request. Endorsed by U. S. Department of Agriculture. Carbolineum Wood Preserving Co., 346 West Broadway, New York.

Early Chicks Make Early Winter Layers.

CHAS. A. CYPHERS

MODEL

INCUBATORS. BROODERS. FEEDS. SUPPLIES. Safest, Easiest and Best. Factory prices. Free catalogue.

W. J. TODD, 426 N. 6th St. Richmond, Va.

Headquarters for Chicken Feeds.

PATENTS SECURED OR FEE RETURNED

Send sketch for free report as to patentability. Guide Book and What to Invent, with valuable list of inventions wanted sent free. One million dollars offered for one invention \$16,000 for others. Patents secured by us advertised free in World's Progress. Sample free.

EVANS & WILKINS, 848 F Street, Washington, D. C.

WANTED

= Bills to Collect =

In all portions of the United States. No collection, no charge. Agencies wanted everywhere; 25 years' experience. PALMORE'S COLLECTION AGENCY, 911 Main St., Richmond, Va.

KILL SAN JOSE SCALE WITH GOOD'S CAUSTIC POT-SOAP NO. 3

ASH WHALE OIL
James Good, 959 N. Front Street, Philadelphia.

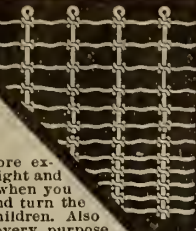
Please mention the Southern Planter.

A WELL KEPT FARM should always have its fences in good order. The fence question can be settled permanently by erecting a **SUPERIOR WIRE FENCE**. No more repairs—no more expense. It always stays tight and will be perfectly good when you are ready to retire and turn the farm over to your children. Also Steel Gates for every purpose.

Prices Low Easy Terms
Let us send our Free catalog explaining how we can give such extraordinary fence value for so little money.

OUR LOCK

THE SUPERIOR FENCE CO.
Dept. J Cleveland, Ohio



BALL BEARING AUTOMATIC GATE


IF NOT THE BEST AUTOMATIC GATE ON THE MARKET SEND IT BACK

GUARANTEED THE SIMPLEST AND STRONGEST AND EASIEST OPERATED AUTOMATIC GATE ON THE MARKET.

Don't I Look Neat?

MONEY REFUNDED IF NOT SATISFACTORY IN EVERY WAY.

E. W. ADAMS.
STATION A, TOPEKA, KAN.



THE NEW CENTURY GATE

Can be opened or closed from your wagon by small child. No springs, no hinges, no castings, no cog-wheels, no wood, no sagging, no dragging. So simple, so easy, no harness and almost no machinery, nothing to wear out or break, nothing to be getting out of fix. Not affected by drifting or deep snow, sleet or ice. Always ready for use and will last a life-time. A model of simplicity, durability and cheapness. If there is no Agent in your locality, please write New Century Steel, Wire & Iron Works, 602 S. REGISTER ST. BALTIMORE, MD



\$100 that the 20th CENTURY FARM GATE is the most simple and practical farm gate ever produced. Do you want to make money?

H. M. MYERS, Sole owner Pats. U. S. and Canada.
Lodi, Ohio.



ALWAYS IN ORDER

MANLOVE Automatic Gate

Saves time, adds to value, safety, beauty and pleasure of home.

MANLOVE GATE CO., 272 E. Huron St., CHICAGO, ILLS.



LAWN FENCE

Many designs. Cheap as wood. 32 page Catalogue free. Special Prices to Churches and Cemeteries

Coiled Spring Fence Co. Box Q Winchester Ind



Do You Ship Tomatoes?

If so—send for our catalogue of standard carriers.

SOUTH SIDE MFG. CO.
Petersburg, Va.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

of good style—a neat, trim, all-black buggy body of the best type. An engine that was running quietly and easily. There was only a slight whir from the machine—no snorting, puffing or pounding noise. Comfort, most evidently. There couldn't be other than comfort in such a buggy, with its roomy seat and full elliptic springs.

It was an automobile that the city man of moderate means might well be proud of.

But the adaptability of such a car is the big thought, if you will just turn it over in your mind for a moment.

The high-wheeler, motor-driven buggy, such as the International Auto Buggy, is not designed with city service especially in view.

While this trim, comfortable auto-buggy was skimming along the boulevard, hundreds of auto-buggies on the deep mud roads of Illinois, Indiana, Nebraska and Iowa, on the hills of Arkansas, Missouri, New York and Pennsylvania, along the sand paths of Utah and Nevada, and across the rain-soaked valleys of Washington—hundreds of auto-buggies were carrying physicians to their patients, lawyers to their courts, merchants to their stores, farmers to their trading centers.

For let us understand that no matter how satisfactory the service which the auto-buggy renders the city man, it is designed and built for the sort of service which is too much to ask of the intricately built machines of the big high-power, high-speed automobiles; too much to ask of low wheels and pneumatic tires. The auto-buggy is built for dirt roads—mud roads when the rain and snow come—sand and hills. And on such roads the auto-buggy reveals all its worth.

The International Auto-Buggy is a roomy powerful, practical motor vehicle, built with one seat or two seats, with or without top. It is a simple, powerful, comfortable car of great durability. There is no question about its positive value, in a business way, on the farm, and no question about the pleasure it adds to family life on the farm.

If you will address the International Harvester Co. of America, at Chicago, the new 1909 International Auto-Buggy Catalogue will be sent you. It is a book full of interesting facts about the auto-buggy and interesting photographs showing its construction and the car in operation.

LOOK TO YOUR HARVESTING MACHINE.

The annual advertising of the International Harvester Company of America, warning farmers to look to their harvesting machines and be fully ready for the harvest, should not go unheeded by our readers.

Harvest Time is Fast Approaching. You ploughed in season. You fer-

Harness leather becomes hard, brittle, unsafe, when the pores in the leather are open to wind and moisture. An application of

EUREKA Harness Oil

fills the pores, seals them against these hardening, rotting agencies and keeps the harness a beautiful black, soft, elastic, and tough. Eureka Harness Oil does wonders for a harness. Ask your dealer.

STANDARD OIL COMPANY
(Incorporated)



BARGAINS IN 2nd Hand Machinery.

THE WATT PLOW COMPANY,
Richmond, Va.

- 1—8 H. P. Geiser Engine and Boiler on wheels in first-class condition.
- 1—10 H. P. Geiser Engine and Boiler on wheels. In fine condition.
- 1—12 H. P. Ames Engine and Boiler on wheels.
- 1—25 H. P. Detached Engine.
- 1—8 H. P. Frick Eclipse Engine and Boiler on steel wheels in good condition.
- 1—20 H. P. Detached Engine and 1 25 H. P. Boiler in first-class condition.
- 1—20 H. P. Geiser Engine and Boiler on wheels and 1 No. 1 Geiser Saw Mill with 50-inch saw and all belts. This outfit has only been in use for about 18 months and is in first-class condition.
- 1—4-inch, 4-sided Molder.
- 7—20-inch Planer, Matcher and Molder complete with countershaft and pulleys.

We invite your correspondence and will gladly give any information desired.

THE WATT PLOW CO.,
1426 E. Main St., Richmond, Va.

We Will Give A RURAL MAIL BOX, The best and handsomest Galvanized Steel Rural Mail Box made, to the first person sending address of party canvassing for petitions for new Rural Route. Write today.

KENTUCKY STAMPING CO., DEPT. 25 LOUISVILLE, KY.

CALVES Raise Them Without Milk. Booklet Free.
S. T. Beveridge & Co., Richmond, Va.



CAL
KLE
ASE

**An Easy
Turning
Wheel
Pays
Best**

When
you're
studying
ways to in-
crease business

—how to make
more trips per day, or how to carry
more pounds per trip—remember

**MICA
AXLE
GREASE**

It puts good dollars
into many a pocket by
saving wagon-wear
and horse flesh.

A little on each wag-
on spindle puts "go"
into a whole week's
business.

The best thing for
wheels is Mica Axle
Grease. Ask your
dealer and try it.

STANDARD OIL CO.
(Incorporated)



**A Great Discovery.
DROPSY**
CURED with vege-
table remedies; re-
moves all symptom
of dropsy in 8 to 20
days; 30 to 60 days
effects permanent
cure. Trial treat-
ment furnished free
to every sufferer;
nothing fairer. For
circulars, testi-
monials and free
trial treatment
write **DR. H. H. GREEN'S SONS,**
Atlanta, Ga.

Do You Ship Peaches?

If so—don't fail to send for our
catalogue and prices for 1909.
SOUTH SIDE MFG. CO.,
Petersburg, Va.



FENCE STRONGEST
MADE. Bull-
strong chick-
en-tight Sold to the user at Wholesale
Prices. We Pay Freight. Catalogue free.
COILED SPRING FENCE CO.,
Box 63 Winchester, Indiana.

tilized your fields. You made the
best seed bed possible. You leveled
and rolled the ground and you drilled
in the grain, and then you looked con-
fidently to Mother Nature to do her
part.

It has cost you not a little in labor
and money and you are looking for-
ward with considerable anxiety to the
time when you will reap your harvest.

But you have another duty to per-
form. Nature is doing her part well.
She is growing the crop rapidly—more
rapidly, perhaps, than you think.
Soon the crops will be grown and
ripened and then—then you must be
ready to harvest it quickly.

There must be no delay. It may be
necessary to cut and shock it all in
a very few days in order that you
may save it all. It is not a matter of
willingness to work. It is a matter
of readiness with proper machines to
harvest your grain quickly and eco-
nomically—a matter of saving it all
so you will reap the whole reward to
which you are entitled.

You are not concerned as to what
name is painted on your harvester
or mower, but you are greatly con-
cerned about the efficiency. You want
your machine to be right working.
You want it to be sure. You will
have no time to stop and make re-
pairs when the harvest is on. You
will not tolerate waste.

**What Harvesting Machine Shall You
Buy?**

You should decide that matter with-
out bias or prejudice. Decide it sim-
ply and solely in your own interest.
What binder or mowing machine will
be sure to serve your own interest
best?

**USED 15 YEARS—CURES EVERY
TIME.**

Genoa, Fla., Jan. 3, 1908.

Dr. B. J. Kendall Co.

Dear Sirs:—Please send me one of
your books. I have used Kendall's
Spavin Cure for the last fifteen years
and have tried it for several different
things and find it to cure every time.
It is the only liniment that I depend
on. Can't do without it.

Yours truly,
W. J. POWELL.

ABOUT SCARS ON HORSES.

It is not generally known that it is
possible to remove an old scar tis-
sue and heal with hair on and leave
no blemish. Absorbine will do the
work, and detailed instructions for ef-
fecting cure are given in pamphlet,
"How to Remove Blemishes," which
is packed with every bottle of Absor-
bine, or will be mailed you postpaid up-
on request.

Mr. L. C. Anderson, of Maysville,
Ky., writes under date of January 5,
1909: "I cured a very badly dew-
poisoned ankle, restored new hair to
an old scar by using Absorbine."

Absorbine is \$2.00 per bottle at

**Ripley's
Fly Remover**

Instantly removes all
flies, mosquitoes, lice and
other insects from cattle,
horses and other animals
sprayed with it. It is
healing to any sore. Ani-
mals rest easy and feed
quietly all day. Cows
give 1/4 more milk, which
is a big saving. 1 gal. will
protect 500 cows. Money
refunded if animals are
not protected. Endorsed
by the best class of peo-
ple. Order at once and
secure agency, you can sell hundreds of gallons.
1 gal. \$1.10; 2 gal., \$2.10; 5 gal., \$4.50; 10 gal., \$9.00.
Ripley's Special Sprayer for applying same, \$1.;
4 gal. Compressed Air Sprayer for applying same
on large herds, \$5.00



The Ripley Hardware Co.,
Gentlemen:—For three years I have been experimenting with
different things to keep flies off my cows, but not until I tried
your Fly Remover and Compressed Air Sprayer was I success-
ful. I used this last year and found that it cost less than one cent per
week per cow. With your Compressed Air Sprayer it takes but
a few minutes to put it on, and the result it has been that my cows
were free from flies, and during the year gave 6400 pounds of
milk each, which made 324 pounds of butter per cow. I can heart-
ily recommend it to all stock owners.—**JOHN ARMSTRONG,**
Pres. State Board of Agriculture, De Smet, S. D., June 4, 1901.
RIPLEY HARDWARE CO., Box V, GRAFTON, ILL.
Manufacturers of Breeders Supplies.

DAISY FLY KILLER



placed anywhere, at-
tracts and kills all flies.
Neat, clean, ornament-
al, convenient, cheap.
Lasts all season.
Made of metal, cannot
spill or tip over, will not
soil or injure anything.
Guaranteed effective.
Of all dealers or sent
prepaid for 20 cents.
HAROLD SOMERS
150 DeKalb Ave.
Brooklyn, N. Y.

Heiskell's Ointment

and
Medicinal Toilet Soap

Do skin eruptions, pimples and
blotches spoil your good looks and make
you unhappy?

HEISKELL'S OINTMENT will cure
such troubles, and when they're cured
**HEISKELL'S MEDICINAL TOILET
SOAP**, used daily, will keep your skin
like a baby's.

Both are vegetable compounds—
one a healer, the other a preserver.
Send a postal for a new booklet of
general interest.

JOHNSTON, HOLLOWAY & CO., 405 Commerce St., Phila., Pa.

ANNOUNCEMENT

Owing to the many letters re-
ceived, relative to crop rotation and
formulae for the home mixing of
fertilizer, and the amount of time
and labor necessary to intelligently
indite my replies, I have determined
to give up some other work, and de-
voted some time at regular intervals
to correspondence of this character,
making a nominal charge, gradu-
ated to accord with my earning ca-
pacity at other lines of work else-
where.

I, therefore, invite my friends, the
public to write me freely concern-
ing Agricultural Matters. A state-
ment of the value of the time spent
in framing my replies will accom-
pany each letter, and the amount
mentioned be due me only when my
correspondent is satisfied of its value
to himself. **PERCIVAL HICKS,**
North, Mathews Co., Va.

AGRICULTURAL LIME.

PLAIN ROCK

OR

SHELL LIME

BAGS OR BULK

SPECIAL FINE HYDRATED LIME

FOR DRILLING.

If in the market for any grade and any quantity of

LAND LIME

Write for our pricelist and particulars.

T. C. ANDREWS & CO., Inc.

NORFOLK, VA.

Nitrate of Soda

In Original Bags

NITRATE AGENCIES COMPANY

64 Stone Street, New York
Keyser Building, Baltimore, Md.
36 Bay Street, East, Savannah, Ga.
305 Baronne Street, New Orleans, La.
140 Dearborn Street, Chicago, Ill.
1103 Temple Bldg., Toronto, Canada
San Jose, Cal.
321 Stimson Block, Los Angeles, Cal.
603-4 Oriental Block, Seattle, Wash.

ROCK PHOSPHATE

The great soil builder; very finely ground; higher in phosphoric acid than bone and at one-third the cost. Unequaled for mixing with barnyard manure or direct application. For prices write **FARMERS' UNION PHOSPHATE CO.,** Mills in Tenn. Birmingham, Ala.

"PRACTICAL FARMING"

Prof. W. F. Massey's latest and best book is now on sale. It retails for \$1.50, and is worth it. We shall be very pleased to send you a copy at above price and will include a year's subscription to The Southern Planter. Remember, we deliver the book and give you a whole year's subscription for the price of the book, \$1.50.

SOUTHERN PLANTER, Richmond, Va.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

dealers, or sent express prepaid upon receipt of price.

W. F. Young, P. D. F., 109 Temple St., Springfield Mass.

CAUSTIC BALSAM BRINGS RESULTS EVERY TIME.

I can heartily recommend your Gombault's Caustic Balsam. I have used it and found it O. K. It will bring the results every time if instructions are followed.—R. L. Grimm, Lertart, W. Va.

A READY ROOFING THAT NEEDS NO PAINTING.

Farmers all over the country are beginning to wake up to the fact that it is no longer necessary to use ready roofings that require constant painting to keep them tight. The new style of ready roofing with a mineral surface, of which Amatite Roofing is the best known, are becoming very popular and have proven a great success.

The mineral surface of Amatite needs no painting or coating whatever; and, after the roofing is laid, there is no further excuse for trouble.

A sample of Amatite can be secured by addressing the nearest office of the Barrett Mfg. Co., New York, Chicago, Cleveland, Pittsburg, Boston, Philadelphia, Minneapolis, St. Louis, Kansas City New Orleans and Cincinnati.

A WOMAN'S IDEA OF SUMMER COMFORTS.

To every woman, especially the woman who keeps house, the topic of summer comfort in the home is one of never-failing interest.

This is particularly true where comfort in the kitchen is concerned, as it is in this one room that the most trying part of the work is done, such as cooking, baking, ironing and heating water for washday purposes. Even in cool weather such work is not altogether welcome, but it becomes drudgery on days when the mercury is trying to jump through the top of the thermometer, aided by a hot stove that diffuses its almost unbearable heat through the kitchen.

But such days are past. With the New Perfection Wick Blue Flame Oil Cook Stove, kitchen drudgery becomes kitchen comfort, for this wonderful stove is so constructed that it not only produces quick results, but does it all without perceptibly raising the kitchen temperature.

All this means real comfort to the woman who works in the kitchen, especially when considered with the added advantages in the saving of time; in the doing away with all carrying of coal, wood and ashes; in having a stove that can be turned on or off, high or low, as required; and in not having to keep it lighted when not in use.

Then, there is the saving of fuel to be considered, and it is here also



Paint Talks—No. 4 Costly Economy

The practical farmer has long since learned the difference between "cheap" and "economical."

"Cheap" seed—"cheap" fertilizers—"cheap" implements—"cheap" paint—always prove to be most costly.

It requires just as much to put on "cheap" paint as good paint—often more. After it is on it soon cracks and scales and you wish it was off. The worst thing about it is that good paint cannot be put on until the poor paint has been removed, and that means expensive burning, or scraping.

Make your paint of Pure White Lead (Dutch Boy Painter Trademark) and pure linseed oil and you'll have a job that will look right first and last—will wear long and leave a perfect surface for repainting.

The Dutch Boy Painter is your guarantee. All our white lead bears this trademark. If your dealer cannot supply you with the genuine, write us and we will assist you to secure it.

Houseowner's Painting Outfit 14 consisting of color schemes, specifications and adulterant detector, free. Write for it to-day.

NATIONAL LEAD COMPANY

An office in each of the following cities:
New York, Boston, Buffalo, Cincinnati, Chicago, Cleveland, St. Louis (John T. Lewis & Bros. Company, Philadelphia), (National Lead & Oil Company, Pittsburgh)



FARMERS

Insure Your Buildings, Live Stock, Produce, Etc., in Virginia Division, **FARMERS' MUTUAL BENEFIT ASSOCIATION.**

Best security. Property insured \$500,000. Average cost per \$1,000 per year, \$5.00. Territory limited to counties of Chesterfield, Amelia, Powhatan, Nottoway, Dinwiddie, Prince George, Surry, Charles City, New Kent and James City. For plan and membership write to

CHARLES N. FRIEND, General Agent, CHESTER, VA.

Organized January 9, 1899.

RARE BARGAINS IN Northern Virginia Farms

A Few Specimens:

No. 172. Contains 315 acres—40' acres in oak and hickory timber; 5 miles from station, situated near the village; considered one of the best wheat and grain farms in Fairfax county. The land is a little rolling; machinery can be run all over it. The land is all in good state of cultivation; well fenced and watered by springs and running streams. Improvements are a good 7-room house with elegant shade, good stable and all out-houses in good repair. Price \$20 per acre.

No. 194. Contains 175 acres, 25 acres in good timber, balance is cleared, 9 acres in orchard in full bearing, good six-room house, old barn, good granary, hen houses, dwelling in a grand oak shaded lawn, spring at house, farm watered by streams and springs, situated on good pike. One hour's drive from Leesburg, Va. Owner is anxious to sell. Price \$3,500.

No. 208—600 acres Loudoun Blue Grass land, 8-room brick house, in good repair, farm well fenced, elegantly watered, excellent bank barn, good orchard, fine timber. Price \$25.00 per acre.

No. 201—406 acres, Loudoun Blue Grass farm 8-room brick and frame dwelling, elegant repairs, excellent barn 40x100, water in every field, well fenced, good orchard. Price \$10,500.

No. 202—475 acres, Blue Grass land, small 5-room house, land is good, well fenced, excellent water, good small orchard, excellent situation, but buildings are only fair condition. Price, \$9,000.

No. 209.—206 acres, beautiful little Loudoun County farm, 6-room dwelling, beautiful shaded lawn, water in all fields, good fences, land is smooth and level, good barn and outbuildings. Price \$6,500.

No. 210.—273 acres, Loudoun blue grass land, well located in grazing section, excellent orchard, well watered, 6-room house and outbuildings in fair condition. Price \$13.50 per acre.

Write for complete description of these properties and Catalogue of other places.

Wm. Eads Miller,
HERNDON, VA.

that the New Perfection excels. Although equipped with three burners it has but one oil reservoir, thus reducing three separate filling operations to one.

Besides all this, the "New Perfection" is the only oil stove built with a cabinet top. Its commodious top shelf is particularly useful for warming plates and keeping food hot after it is cooked. In addition there are two drop shelves on which may be set the teapot or coffeepot and small cooking utensils. Also has two racks for holding towels.

Altogether, the "New Perfection" is a stove of wonderful utility. Its extremely handsome appearance sets off any kitchen to full advantage. It is superior to the hot coal range no matter what the point of comparison may be—or whether regarded as a summer stove only or as a stove for year 'round use.

Another household article of unusual convenience is the Rayo Lamp, a scientifically constructed lamp that will adorn any room—whether library, parlor, dining-room or bedroom. The Rayo Lamp gives a mellow, steady light that does not tire the eyes. Its center draft burner of the latest design and its fine porcelain shade make it a lamp of combined usefulness and beauty.

The New Perfection Wick Blue Flame Oil Cook Stove and the Rayo Lamp constitute two household articles that will meet any woman's idea of home comfort. In the thousands of homes in which they are already used they are making things cheerful because of their absolutely safety, great simplicity, and wonderful convenience.

ROOFING GUARANTEES.

When a maker guarantees his roofing, it merely means that he puts his claims for it in writing, and if there is any dispute afterwards there are thousands of ways in which the maker can evade responsibility if he chooses.

The makers of Congo Roofing, however, have devised an interesting plan which gives the buyer absolute protection. With each roll of roofing is furnished a Surety Bond issued by the National Surety Company of New York, guaranteeing the faithful performance of the guarantee by the manufacturers. This gives to any possible complainant a Court of Appeals to which he can go, over the head of the manufacturer. In fact, this guarantee bond so pledges that if the manufacturers of Congo Roofing should go bankrupt or close out their business, the Surety Company would still continue to guarantee the reliability and satisfaction of Congo Roofing. The guarantee on the three ply is for ten years.

A copy of the Guarantee can be obtained by addressing the United Roofing and Mfg. Co., Philadelphia, Chicago and San Francisco.



THIS BEAUTIFUL HOME

CAN BE BUILT FOR LESS THAN \$500 complete when our simplified plans of construction are followed. The above price covers cost of all material and labor for completed house, ready to move into. We furnish complete blue-prints and bill of materials for \$5.00, securely packed in mailing tube, post-paid. Circular showing floor plans and dimensions sent on request. Write today and save half the cost of a new house.

UNIVERSAL PUBLISHING COMPANY,
Roanoke, Va.

FIRST NATIONAL BANK

Richmond, Va.

A strong, conservative, well-managed institution. A safe depository for all classes of customers.

Capital	\$1,000,000.00
Surplus	800,000.00
Deposits	6,000,000.00

JOHN B. PURCELL, President.
JNO. M. MILLER, Jr., Vice-Pres.
and Cashier.

A Savings Department for the Thrifty.

MARYLAND AND VIRGINIA

FARMS NEAR WASHINGTON.

Unsurpassed as money-makers; best place on earth for farmers, dairymen, stockmen or poultrymen; mild climate, best markets in country; highest prices; no such word as "Fail" for industrious man. Big bargains here now. 3,500 places to select from. Catalogue free.

THE SOULE CO., Washington, D. C.
Largest Farm Dealers in the South.

Old Virginia Farms.

Climate and Productiveness unequalled. Largest sale list in the State. For full particulars and Free Catalogue address

CASSELMAN & COMPANY,
RICHMOND, VA.

Virginia Farms

MOST SELECT LIST, and in all sections of the State.

FREE CATALOGUE.
R. B. CHAFFIN & CO, Inc.
Richmond, Va.

Please mention the Southern Planter.

SELECT OFFERINGS IN
VIRGINIA REAL ESTATE

\$12,000

Contains 200 acres, 60 acres in oak and hickory timber, balance in grass, small portion under cultivation, lies well up and is gently rolling soil, clay loam with clay subsoil—watered with live streams which are fed by springs—driven well and windmill at dwelling place is well fenced. Is situated right on macadamized road, $\frac{1}{4}$ of a mile from railway station and runs up to corporation limits of a town of about 2,000 inhabitants and about 30 miles from Washington City.

IMPROVEMENTS.—New dwelling, 10 rooms, one bath room, cellar, two large porches, hardwood floors, up and down stairs, hot and cold water to top of house. Is well elevated, affords a splendid view of mountains, large lawn, delightful shade. New barn—main building is 40x70 feet, two wings 30x48 feet each and is two stories throughout, hay fork, covered barn yard 40x50 feet, hydrant in barn, crib, smoke and corn houses are among the outbuildings. Barn was designed to meet requirements of D. C. Health Department for dairy business.

Owner is anxious to sell.

\$45 00 Per Acre.

Contains 825 acres, $\frac{3}{2}$ miles from railway station, right on metal road, 300 acres in virgin oak, right at foot of Bull Run Mountains, balance in grass and under cultivation. Large portion in Blue Grass meadows. Public roads on three sides, well fenced, woven wire and stone fencing, locust posts.

IMPROVEMENTS.—Thirteen-room mansion, two bath rooms, out kitchen, pantry, two servants' rooms, cellar under entire house, handsome cabinet mantels in all rooms, open grates, two porches, large lawn and 120-ft. avenue $\frac{1}{4}$ mile in length leading to road; avenue and lawn delightfully shaded. Foreman's house, 6 rooms, four cabins, 3 rooms each; large bank barn, 60x90 feet, large horse barn, 6 box stalls about 30x40 feet. Carriage house with five stalls for horses attached, harness rooms, two chicken houses, hog houses, corn crib with capacity for about 1,000 barrels, nothing could be added to this place that would be necessary. All improvements are in perfect condition and have been recently painted.

Send for my catalogue of Grain and Grass Farms.

GEORGE W. SUMMERS,
Sterling, Va.

Convenient To
RICHMOND AND WASHINGTON.
VIRGINIA FARMS

Best railroad service and climate.
229 A.—Fine elevation with running water, 1 mile from railroad, fine farm land. \$3,500.

165 A.—1 mile from railroad, running water and other advantages. \$2,500.

900 A.—Stock farm, \$15,000.
Complete list on application.

FRANK H. COX,
Ashland, Hanover Co., Va.

REAL ESTATE FOR SALE.

From the Mountains to the Ocean
Catalogue free. Loans made on farms
Established 1875.

GEO. E. CRAWFORD & CO.,
1009 E. Main Street,
RICHMOND, VA.
Branch, Norfolk, Va.

NO EXCUSE FOR NOT PAINTING.

Paint not only gives an appearance of prosperity to a house or farm buildings, but is worth many times its cost in the preservation of property.

Painted buildings will outlast unpainted buildings every time.

We should like to call the attention of our readers to the unique offer that is being made in the advertisements of the United Factories Company, of Cleveland, Ohio, which are running in this paper.

By their liberal plan, they make it possible to paint every building on the place without sending them a cent of money, that is, they positively guarantee satisfaction and will refund your money, if you are not satisfied with the results. They could not make any such offer as this unless their paint was of the very highest quality.

Furthermore, by their co-operative plan, they make it possible for your newly painted buildings to not only pay for the paint you use, but bring you in a handsome profit besides.

This offer means exactly what it says. It is strictly business.

Before you pay out money for paint it will pay you to write to this well-known firm and ask for their new paint catalogue. It is free for the asking.

A TONIC HELPS.

There's no one thing that a feeder of live stock can do that will be as satisfactory in the long run as to give a small dose of digestive tonic to each cow or steer in the stable.

The advantages of such treatment are too many and too well known to be overlooked by the man who is out for best results. A preparation composed of such helpful elements as bitter tonics, iron for the blood and nitrates to relieve the animal system of waste matter, is bound to pay for itself over and over again in each case where it's consistently given.

The reason is plain, once you think the matter over. When you remember that you, as a feeder, are really a manufacturer, that each cow, steer, hog or sheep that you possess is but one of your machines which you are using to produce milk or meat, you are in a position to get a proper idea of the good of a tonic. For this is true—a tonic keeps the animal machine going smoothly and profitably, just as a little oil smooths and quickens the motion of a machine of steel and iron.

For the sake, then, of your own success, depend on Dr. Hess Stock Food. It is a true tonic—it gives the animal receiving it a great digestive power. The maximum amount of ration is assimilated and turned into good flesh, or, in the cow, into milk. There is no such thing as loss of appetite, "off-feed" periods, indigestion, or any other troublesome disorder among cattle, when Dr. Hess Stock

**CRITTENDEN'S
VIRGINIA REAL
ESTATE AND
LOANS OFFICE**

North-Western Virginia Farms for Sale. A Land of Sunshine, Short Winters and Healthy Climate.

No. 166 B. Must be sold within the next 90 days, at any reasonable sacrifice. It contains 600 acres of choice and productive land, 300 acres in Blue Grass sod. Improved by substantial buildings, 2 orchards, finely watered, 3 miles from railroad. Immediate possession. If you are interested in a fine stock farm, write for confidential description.

No. 167 B. Nice little farm, 100 acres of good productive land, 2 dwellings and other necessary buildings, fine water, $\frac{1}{2}$ miles from church, school, and store; 8 miles from railroad. \$25 per acre.

No. A. 21—230 acres, some timber, \$23 per acre; buildings out condition; farm has been generally neglected but very good value at the price. 2 miles from R. R. station, church, stores and school. Easy terms.

No. A. 23.—156 acres, at \$50 per acre. Elevation 450 feet. It would make one of the show places in Loudoun—fine home for hunt club, 2 miles from R. R. station, good water, comfortable buildings.

No. A. 24.—346 acres. Fine stock farm, finely watered, good land, average buildings, plenty of timber, church and school near, 6 miles from R. R. Price, on easy terms, \$10,000. Good value.

No. 103.—One of the most attractive agricultural homes in Loudoun County. Beautifully located in a highly desirable neighborhood. Fine buildings, all modern improvements; two tenant houses, plenty of fruit; well watered and fenced. This farm embraces 486 acres of highly productive land that may be utilized along any agricultural lines with profit. $\frac{1}{2}$ mile from R. R. Price \$34,000. Terms to suit.

No. 111.—Fine stock farm of 290 acres, borders on the Potomac river, 150 acres river bottom that will make 20 barrels of corn per acre, the upland will produce not less than 10 barrels. Fine spring; good fruit. Comfortable buildings, 200 ft. or more above the river—very healthy, 5 miles from R. R. This property is a bargain, at \$60 per acre on very easy terms.

No. 161.—This attractive proposition of 428 acres, borders on the Potomac River, 200 acres of river bottom, 100 acres well set Blue Grass of long standing. The buildings are beautifully located overlooking the Potomac River for miles, all in good condition; modern house containing 11 rooms—standing well back from the river on a prominent elevation. Large and ample outbuildings. The soil mostly good strong clay, producing well. 8 miles from R. R., with good stone road for most part of way. Price \$25,000, half cash.

Farther and special descriptions furnished on application. All business transacted through this office guaranteed to be as represented, and strictly confidential.

DeL. S. CRITTENDEN, Broker,
Ashburn, Va.

BARGAINS

841 acres 5 miles from Herndon over good roads; one mile from pike; 200 acres in timber, part of it extra good; land rolling and well drained; convenient to schools, churches, stores, etc. Three sets of buildings, two houses barns, etc. In good condition. This place is especially adapted to stock raising, and is cheap at \$23 per acre. \$6,500 down, balance to suit.

In the best section of Loudoun Co., surrounded by high priced and beautiful farms, 169 acres, 7 miles from rail over a fine pike; two miles from school; 40 acres in fine oak timber; well fenced; divided into several fields with water in every field. In a good state of cultivation—especially adapted to blue grass; good house of 7 rooms; new barn 35 by 40; 4-room tenant house; all necessary outbuildings. Price \$4,500; \$2,000 down, balance to suit. Half of wheat and corn crop to go to purchaser.

154 acres well located in Loudoun Co., 7 miles from rail over macadam road; 20 acres in second growth timber; large stream through place; good blue grass land, in a good state of cultivation; well fenced; 1 1-2 miles from school; 1 mile from P. O.; house of 5 rooms with new barn 30x40; all necessary outbuildings. Price \$3,500. \$2,000 down, balance to suit.

SEND FOR NEW SPRING LIST.

A. H. BUELL,
Real Estate Broker,
HERNDON, VA.

A SPLENDID DAIRY FARM

Of 204 acres, one mile from station, less than 50 miles from Washington City, all equipped for business, together with cows, all other stock and farming implements. Well watered and fenced. Nine-room dwelling, 6-room tenant house, large barns, etc. A bargain to a quick purchaser.

NICOL & RANDELL,
Manassas, Va.

A RARE INVESTMENT

458 acre plantation, Southern Maryland, mile frontage on salt water. 360 in cultivation, fertile soil. Large costly dwelling, six tenements, three barns, etc. Beautiful view Patuxent river and Chesapeake bay. Oysters, fish, terrapin, game in abundance. Sacrifice \$12,000. Easy terms. National Capitol Farm Agency, 512 F. St., N. W., Washington, D. C.

180 Acre

FARM FOR SALE.

At a bargain, 3 1/2 miles from Saxe Station, in Charlotte Co. Well located convenient to schools, churches, mills, and stores, well watered by springs and branches, land well adapted to tobacco and all crops grown in this section. Only one new log cabin on the land; timber enough on the place to do necessary building. Price \$600 cash.

W. M. WATKINS, Saxe, Charlotte Co. Va.

"In the Green Fields of Virginia."

Homes for all; health for all; happiness and independence for all. All sizes of Farms at corresponding prices but ALL reasonable.

MACON, & CO., ORANGE, VA.

Food is used. This fact is abundantly proved by the constant and uniform success of feeders who use it.

Distemper and the other similar troubles among horses, sheep and dogs are aggravated in the spring by the chilly nights and exposures to storms as well as the sudden change in some cases from dry food to the green new grass. A regular tonic in advance of Craft's Distemper Cure is a good preventive of colds and the other troubles, and a cure should the troubles come. Our readers should note the advertisement in our columns and get it of dealers. If not easily found it is sent at fifty cents and \$1.00 per bottle, prepaid, direct from the manufacturers, The Wells Medicine Co., Third St., Lafayette, Indiana.

MADE THE BLIND SEE.

Cyrus Hedges, Gladstone, Illinois, writes, under the date of February 19th, that Visio has completely restored the sight of a horse that has been blind a month, and the appearance of the eye is perfect. Visio for sale by druggists, or sent postpaid on receipt of the price.

Visio Remedy Assn., 1933 Wabash Ave., Chicago.

CARE OF THE SKIN.

A clear, healthy skin is a possession highly valued by all and is in most cases easily acquired. The one important thing is to keep the pores open, by bathing frequently using a good bland soap.

In making your selection, be careful to avoid the cheap, but highly perfumed soaps, as in nearly every case they are not only made from cheap and impure fats, but contain an excess of alkali, which robs the skin of its natural oils, leaving it dry and shrivelled.

One of the best, if not the very best, complexion soaps on the market is Heiskell's Medicinal and Toilet Soap. It is made from pure oils in combination with gums and herbs of well-known medicinal value. It stimulates the pores to healthy action and is cleansing, soothing and healing in its effect. The manufacturers, Messrs. Johnston, Holloway and Co., Philadelphia, will gladly exchange a sample for a post card from you.

CONCRETE OR CEMENT SILOS.

Of late years a big demand has sprung up for more substantial structures in building operations. This is evidenced by the large number of factory and other buildings springing up in all parts of the country made of concrete and cement blocks. The concrete and cement block construction is getting to be very popular in so far as silos are concerned; especially is this true where permanency is desired, such as on established stock farms, etc.

ATTENTION

HOMESEEEKERS AND INVESTORS.

Send for my Map and new Catalogue showing and describing this section of Northern Virginia, and a complete list of all property now on the market, consisting of Grain, Grass, Dairy, Fruit, Stock, Truck, Poultry, and Blue-grass Farms, Town and Business Places.

I claim and can prove that this section shown by my map, has advantages over any other part of the State. It is not only beautiful and healthy but is productive and progressive, and very accessible to Washington and Alexandria cities, by rail and pike which gives all producers a fine home market.

I am not a broker or speculator, I bring the buyer and seller face to face, I have no speculative interest whatever in any property. My business is wholly on commission which is paid by the seller.

References furnished in my Catalogue. If you can't come, write.

W. H. TAYLOR, Herndon, Va.



IN SUNNY VIRGINIA

\$1,650.00 BUYS THIS BEAUTIFUL HOME and 40 acres of best fruit and general farming land, including good barn, corncrib, tool shed and chicken house, all new. Rich soil, fine climate, good markets, abundant water, excellent neighbors and best schools.

OTHER LANDS \$10. PER ACRE & UP.

Cheap Excursions Twice a Month. Sit right down and write for beautiful illustrated booklet, list of farms, etc., to F. H. LABAUME, Agrl. and Indl. Agt. Dept. 500 Norfolk & Western Ry., Roanoke, Va.

FARMS For Sale.

If you want a farm to raise grass, grain, stock, fruit or tobacco, buy from us. Chocolate soil with red subsoil. Address

W. W. BARNES & CO.,

LAND AND TIMBER AGENTS,
Amelia Courthouse, Va.

JAMES RIVER FARM

Of 222 1/2 acres, for sale. 80 acres low grounds, well fenced and cross fenced with woven wire, land in fine state of cultivation, all buildings in first rate shape, old colonial house of 10 rooms, 4 porches, slate roof, rock foundation. All farming implements go with place. Price \$8,500—no less. Terms to suit. Address C. H. GARROD, West View, Goochland Co., Va.

Please mention the Southern Planter.

THE IDEAL VIRGINIA FARM

Located in Fairfax County, Virginia, only 16 miles from Washington, 2 miles of electric cars, 40 minute schedule.

This beautiful little farm contains 96 acres, 80 acres being cleared and under very highest state of cultivation, the average corn crop being 50 to 60 bushels shelled corn per acre; now nearly all down in good grass sod.

The present owner has for ten years carried on this farm, about 25 fine butter cows, manuring the land very heavily. Farm is well fenced and splendidly watered.

Fronting on good road and in one of the very best neighborhoods and farming sections in Virginia and is the only farm in this entire section that is for sale.

Splendid apple orchard of 200 trees, nearly all in good bearing. Improved by a splendid 9-room house, surrounded by a beautiful, well-shaded lawn, fine porches, pump at the door, large barn and other outbuildings.

When you buy property near Washington, you have the best market in the East and secure property which will in a few years, double in value.

We are authorized to sell this beautiful home for only \$8,250. which is really a sacrifice considering the very low price of the land, outside of the buildings on the farm, which could not be duplicated for \$5,000.

You will do well to investigate this property.

BALLARD & LANHAM, Inc.
Real Estate,

621 13th St., N. W., Washington, D. C.

— FARMS —

IN

Southside Virginia

\$10.00 to \$30.00 per acre.

With buildings, fruit, timber, good water, best markets. Level land, productive soil.

Write for our Real Estate Herald with map and full information.

PYLE & COMPANY, Inc.

Petersburg, Virginia.

A CHARMING OLD VIRGINIA HOME in Albemarle Co., 540 acres, 150 being rich low grounds. Timber and river boundary. Colonial style brick dwelling, some modern equipment and in first class condition. All necessary outbuildings. Extended and beautifully shaded lawn. Magnificent views. Station one mile. Great hunting territory close by. Price \$25,000.

Illustrated Register free. Also handle timber and mineral lands.

H. W. HILLEARY & CO.,
Charlottesville, Va.

A Beautiful Loudoun County Farm

Of 227 acres, 3 miles from station, excellent improvements. Well watered. Good orchard. Land in good condition — part in blue grass. Will sell farm only, or with all stock, farming implements and household goods and give immediate possession. For particulars, address

NICOL & RANDELL,
Manassas, Va.

In the past the high first cost of this form of construction has been the chief factor against its more extensive use, but this has been due to our insufficient knowledge as to the best and most economical methods in handling material. The price of lumber has been steadily rising, while that of good Portland Cement has been decreasing, and good qualities can now be obtained at a fair price. It seems, therefore, to be generally conceded that the concrete or cement block silo will be the silo of the future.

Then general concensus of opinion among those who have made a study of the matter seems to be well voiced in Bulletin No. 102 of the Agricultural Experiment Station of the University of Illinois when it says: "From what we know now the round wood silo plastered with cement seems to be the best construction, but the indications are that when we learn to handle concrete to the best advantage this will be the material for building silos."

Thus opens the third chapter of "Modern Silage Methods," a 224 page book published by the Silver Mfg. Co., Salem, Ohio. Readers of this paper who are interested should look up their ad. on another page and secure a copy of their book.

REVERSIBLE DISC PLOWS.

Elsewhere in this edition appears an advertisement of the Chattanooga Reversible Disc Plow, made by the Chattanooga Plow Company, Chattanooga, Tennessee.

The success of this disc plow in all of the principal agricultural countries of the world is conclusive evidence that it meets the requirements of the most intelligent farmers.

The manufacturers do not claim that this plow will do all kinds of plowing under all conditions, but they do claim that when the ground is in plowing condition it will do the same amount of work as a moldboard plow, with less draft, and do it better. This does not apply to land covered with sod, as a disc plow is a pulverizer, as well as a breaker, and stiff sod land is exceedingly difficult to pulverize.

The disc plow is of greater value, in fact, almost indispensable, in plowing land that is dry and hard from drouth or other causes, and its qualities as a pulverizer under those conditions are greatly appreciated by the farmer who is sufficiently fortunate to own one. Land that contains stumps, roots or underbrush, as well as land covered with pea vines, can be plowed quicker and better with a disc plow than with a moldboard plow.

The reversing feature and the fact that this plow is made in two and three horse sizes, adapts it to a small or large farm regardless of whether it be hillside or level land. An entire field, large or small, may be

THE PENINSULA SECTION

Our farmers made \$100 per acre clear from early potato crop season of 1908. This is the coming section. Write us.

PIEDMONT AND TIDEWATER LAND COMPANY (Inc.),

Box P, Williamsburg, Va.

FARMS.

Mineral and Timber Lands.
Free list on application.

W. A. PARSONS & CO.,

1527 East Main St., Richmond, Va.
Davis Hotel Bldg

Farm For Sale 7,000

Profit-Paying Farms in 14 States. Strout's New Monthly Bulletin of Real Bargains, profusely illustrated, mailed free; we pay your R. R. fare. **E. A. STROUT CO.,** Book 703 World's Largest Farm Dealers. Land Title Bldg., Phila

VIRGINIA HUCK BASKETS.

The only safe package for Huckleberries. Send for catalogues and prices.

SOUTH SIDE MFG. CO.,
Petersburg, Va.

THE FAMOUS IRON PEA

Matures pods in 60 days. Will not shed foliage which, when cut, makes the very best hay. Have planted them 20 years and never had a complete failure. Plant any time. Sure to be a stand when it rains if ground is warm. Bushel, \$2; pound 25c. postpaid.

J. C. FOWKE, Baldoek, S. C.

COW PEAS

GERMAN MILLET

GERMAN CLOVER

CANE SEED

KAFFIR CORN

CLAY PEAS

BLACK PEAS

BLACK EYE PEAS

MIXED PEAS

SEED CORN

SEED SWEET POTATOES

WE HANDLE THE ABOVE AND

ALL OTHER SEASONABLE

SEED. WRITE FOR SAMPLES

AND PRICES.

N. R. Savage & Son
RICHMOND, VA.

Please mention the Southern Planter.

Send your orders for

COW PEAS

and

Soja Beans

to

Diggs & Beadles

"THE SEED MERCHANTS"

1709 East Franklin ST.
RICHMOND, - - VA.

Branch Store 603 and 605 East Marshall Street.

We are headquarters for superior Seeds of all kinds.

GRASS and CLOVER SEEDS.

Garden and Flower Seeds, Cow Peas, Field Beans, Sorghums, Millets and all seeds of the highest quality and germination.

Write to-day for our free catalogue and price list.
 Your Correspondence Solicited.

Cow Peas.

Clay, Black, Wonderful, Whippoorwill. Mixed and other varieties.

SOJA OR SOY BEANS,
 Canada Field Peas,
 Millet, Buckwheat, Etc., Etc.

Write for prices to headquarters.
WALLERSTEIN PRODUCE CO.,
 Richmond, Va.

COW PEAS

FOR SALE.

Mixed	\$1.30
Clays	1.40
Whip-Poor-Will.	1.50

Soja Beans

Mammoth Yellow	\$1.25
----------------------	--------

All f. o. b. here; prices subject to market fluctuations.
Hickory Seed Co., Hickory, N. C.

NEW WARD BLACKBERRY

ONE OF THE BEST.

Fine stock of plants for spring delivery Send for descriptive circular of the Ward. For other nursery products, send for general price list.
FRED. SHOOSMITH, Chester, Va.

plowed without leaving a water furrow (dead furrow) and without the team tramping the plowed ground when turning.

In conclusion, the greatest value to the farm, to be derived from using a reversible disc plow, is the breaking of the hard pan that has been caused by plowing the land the same depth year after year with a moldboard plow. The disc plow breaks this hard pan and does not carry the subsoil all to the top, but mixes it with the old soil that has been worked for years, thus it increases the value of the land and produces better crops.

WASHINGTON NOTES.

Rural Carrier's Life Strenuous.

The life of the rural letter carrier is not all a bed of roses, for when in the performance of his daily routine duties his time in serving a standard route of twenty-four or more miles is fully occupied, even when the condition of roads and weather is favorable, but there are not infrequent occasions when the monotony of his duties is relieved by incidents and circumstances arising which call forth the most strenuous activity and require the endurance of hardships that would cause men of less courage and strength to falter. The rigors of the northern winters, the blinding blizzards and snowdrifts of mountains and plains, cloudbursts and swollen streams—all have to be encountered by rural carriers and there have been occasions when carriers have lost hands and feet from freezing or narrowly escaped death by being lost in snowdrifts and blizzards or being drowned in swollen streams.

An illustration of the trials of a rural carrier is given in a letter recently received by Fourth Assistant Postmaster General, P. V. DeGraw, from the Postmaster at Curtis, Oklahoma, recounting the experience of Joshua A. Trentham, the carrier on route No. 1 out of Curtis. The route in question is nearly twenty-three miles long. A month or two ago, while serving the route a violent windstorm overthrew the carrier's wagon. He set the vehicle right, with the aid of nearby patrons, and proceeded, when a second time he was blown over and the mail and his postal supplies were scattered over a large part of the State of Oklahoma. Friendly farmers aided him in righting his wagon and in picking up such mail and supplies as were to be seen. As he started on again he found that a prairie fire was coming down on him driven by the fierce gale. He had a life and death race with it and finally beat it to a big plowed field, which he entered by cutting down the wire fence. Here he sat in comparative safety while the fire drove by.

In another State at about the same time carriers found the roads obstructed with telegraph poles, barbed wire, trees and brush, slightly covered

GERMAN OR CRIMSON CLOVER

- GERMAN MILLET
 - GERMAN CLOVER
 - CLAY PEAS
 - BLACKEYE PEAS
 - MIXED PEAS
 - SEED CORN
 - KAFFIR CORN
 - SEED SWEET POTATOES AND OTHER FIELD SEEDS, INCLUDING ALL THE DIFFERENT VARIETIES OF GRASS SEEDS.
- WRITE FOR PRICES AND SAMPLES.

N.R. Savage & Son
RICHMOND, VA.

SOJA BEANS

\$1.50 Per Bushel, Delivered.
 PUMPKIN YAM and VINELESS SWEET POTATO Plants, \$1.50. Per 1,000 f. o. b. here.
E. W. JONES NURSERY COMPANY,
 Woodlawn, Va.

SOJA BEANS

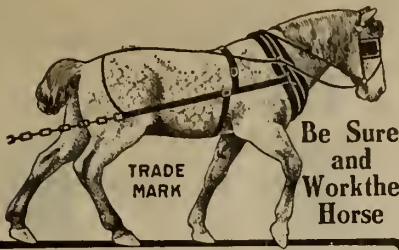
For Sale. Write for prices.
A. D. Reynolds, Bristol, Tenn.

SWEET POTATO PLANTS

Reasonable Rates in Large Lots.

For prices and variety apply

J. S. LINTHICUM,
 Welhams, - - Md.



HE CAN WORK EVERY DAY

If you use Bickmore's Gall Cure your teams can work right along and be cured of Saddle and Harness Galls, Chafes, Rope Burns, Cuts, Scratches, Grease Heel, etc. while in harness. The more work the quicker the cure.

BICKMORE'S GALL CURE

Is the standard Remedy for all these and similar troubles. Is excellent for Mange and Sore Teats in cows. Above trade mark is on every box of Genuine Bickmore's Gall Cure. For sale by dealers everywhere. Money refunded if it fails. Sample Free and Horse Book if you'll send 6c for packing and postage.

Bickmore Gall Cure Co., Box 935, Old Town, Maine.



No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

Fleming's

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Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

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"IT NEVER FAILED"



Mr. Albert Klever, Elk River, Minn., writes on Feb. 24, '08: "Please send me one of your books, A Treatise on the Horse. Have been using Kendall's Spavin Cure for about 20 years and it never failed."

Kendall's Spavin Cure

Is relied on by horsemen everywhere for curing Spavin, Ringbone, Curb, Splint, All Lameness. The world's best known and surest horse remedy.

All druggists \$1 a bottle, \$6 for \$5. Beware of substitute remedies. Book, "Treatise on the Horse," free from druggist or write to

Dr. B. J. KENDALL CO., ENOSBURG FALLS, VT.



Distemper

Cured by the use of DR. CRAFT'S DISTEMPER AND COUGH CURE. Endorsed by leading breeders, turmen and farmers. Send today for a bottle or get it from druggist. 50c and \$1.00. Guaranteed to cure. Your money back if it fails. Send for free booklet today.

WELLS MEDICINE CO. Lafayette, Indiana

with snow and ice, and it is told of quite a number who, finding the conditions unsafe for the use of horse and wagon, threw their mailsacks over their shoulders and on foot travelled quite a distance on the route in order that the patrons might receive their letters or morning paper.

Study of Iron Rust.

Dr. Allerton Cushman, Assistant Director of the Office of Public Roads, of the Department of Agriculture, will sail for England to attend the meeting of the British Iron and Steel Institute, which will be held May 14th. Dr. Cushman has been invited to attend the meeting to speak on his investigations into iron rust. He made a special study of this very practical subject for about five years. The attention of the Department of Agriculture was first drawn to the subject through farmers' complaints at the rapidity with which wire fencing deteriorated. It appeared that the later wire fences put up lasted much less time than some of the old fences. It was found that this was due largely to the method of making wire fence. Doctor Cushman turned from this study to a more general investigation of the subject, which led to important discoveries not only in the method of oxidation and the resisting qualities of various irons, but in the development of rust-resisting paints.

After attending the meeting of the Institute, Dr. Cushman will go to France and make a study of rural highways.

To Stop Stock Gambling.

Considerable attention has been invited to the bull wheat market resulting in an increase in the price of the grain and a prospect of a rise in the price of flour and with it more money to be paid out for a loaf of bread. Representative Scott, of Kansas, Chairman of the House Agricultural Committee, has introduced a bill prohibiting through the invocation of the the interstate commerce section of the Constitution the dealing in futures of grain, cotton and other farm crops.

Many Southern representatives have been fighting for years in an effort to put the cotton exchanges out of business and to bring about, through legislation, the prohibition of dealings in cotton futures. It is believed in Congressional circles that every one of them will support the Scott bill.

If the Scott bill becomes a law, it will only place the United States in line with a number of foreign countries where gambling or dealing in futures of foodstuffs or agricultural products is an offence punishable by heavy fine and jail sentence.

"Events of the past two or three weeks," said Mr. Scott, in an interview, "have brought this proposition of dealing in futures of farm products

Warranted to Give Satisfaction.

Gombault's Caustic Balsam

Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Trush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

CURE THE SORE ON YOUR HORSE

Work him while doing so if you have to—but a day or two rest is better—yet in either case

WILSON'S GOLDEN SUCCESS HEALING POWDER

Will actually heal quickly and permanently any Collar or Saddle Galls, Open Sore, Cuts, Burns, Mud Scalds, Scratches, Grease Heel or any wound on Horse or Cattle. A purely antiseptic powder, and with each package goes the endorsement of six hundred physicians.

Send twenty-five cents in stamps to

GILBERT BROS. & CO.
9-11-13 N. HOWARD ST.
BALTIMORE, MD.

And receive a package by mail. Every horse owner should have it.

ASK YOUR DEALER FOR IT HE MAY HAVE IT

ABSORBINE

Removes Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from any Bruise or Strain, Cures Spavin Lameness, Allays Pain Does not Blister, remove the hair or lay the horse up. \$2.00 a bottle, delivered. Book 1 D free.

ABSORBINE, J.B., (mankind's 1.00 bottle.) For Synovitis, Strains, Gouty or Rheumatic Deposits, Varicose Veins, Varicose, Hydrocele. Allays Pain. Book free.

W. F. YOUNG, P. D. F., 109 Temple St., Springfield, Mass.

DEATH TO HEAVES Guaranteed

NEWTON'S Heave, Cough, Distemper and Indigestion Cure. A Veterinary Remedy for Wind, Throat and Stomach troubles. \$1.00 per cao. of dealers, or express prepaid. Send for booklet. The Newton Remedy Co. Toledo, Ohio.

HACKETT'S GAPE CURE
 KILLS THE WORM AS WELL AS THE GERM

THE MOTHER USED TO DO

T.C. HACKETT
 REGISTERED HILLSBORO, MD. THE NEW WAY.

Hackett's Gape Cure

It is a powder. The chicks inhale it. Goes right to the spot. Kills both worm and germ. Whole brood treated at once, in five minutes. Full size package, postpaid, 35c.

Dealers prices and a list of 37 jobbers, covering 14 states sent upon application.

Notice—Upon receipt of 35 cents we will send 1 full size package of Hackett's Gape Cure to every boni fide subscriber or advertiser of the Southern Planter and if it fails to cure your chicks of Gapes when used as directed we will return your money.

Very truly,
T. C. HACKETT, Hillsboro, Md.
 Mr. B. Morgan Shepherd, Business Manager of this paper, has used Hackett's Gape Cure with success.

DEATH TO HAWKS

Life to Chickens and Turkeys.

Cock of the Walk.

"HAWK" The Barn Yard Robber.



I take Macnair's Chicken Powders and feed my children on them too. Look at me and observe the hawk. Cock a doodle doo.

Died after eating a chick of that old Rooster, which had been fed on Macnair's Chicken Powders. Alas! Alas.

MACNAIR'S CHICKEN POWDER

kills Hawks, cures Cholera, Gapes, Roup, Indigestion, Leg Weakness, and keeps them free from Vermin, thereby causing them to produce abundance of eggs.

Sample package 25 cents.
W. H. MACNAIR, Tarboro, N. C.



THE OLD RELIABLE LAMBERT'S DEATH TO LICE

increases Poultry Profits and is practically indispensable to those who raise, sell or exhibit Poultry. Is the quickest and safest Lice Killer on the market and guaranteed not to injure eggs or chickens. Pocketbook Pointers on "Modern Poultry Methods" sent for 2c stamp. Write to-day.

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 651 Monon Bldg., Chicago.

Always mention The Southern Planter when writing advertisers.

very sharply before the people. We know that a practical wheat corner exists, that the price of flour has gone up and that an increase in the selling price of bread is threatened.

Now, if that increase be only a cent a loaf, the total for a day, a week or a month will be something enormous, the greater part of which must be paid by the poor. I think a measure to prohibit the dealing in futures of farm products will have more backing than ever before. This business of boosting up the price of wheat after the producer has sold it is bad business, and the results of this proposition in increasing the cost of flour and of bread constitute an outrageous tax upon the people."

The Only Corner in Wheat.

"The only successful wheat corner I ever heard of was the one pulled off by Joseph, who had a coat of many colors," remarked Secretary Wilson of the Department of Agriculture. In these words Mr. Wilson showed that he has no admiration for the methods and achievements of the recent movement. It has been intimated in official circles that there is a marked discrepancy between Patten's estimate of the visible wheat supply and the estimates put out by the Department of Agriculture, and Secretary Wilson believes his figures are correct and will finally swamp Patten. "To successfully corner the wheat market," he stated, "you have to keep buying and buying and buying until finally the times comes when you can't buy any longer, and then the crash comes."

No More Adulterated Candy.

Dr. Wiley, Chief Chemist of the Department of Agriculture, in a recent address, showed the irony of a situation with respect to the pure food law by a clause in the pure food law regarding the use of adulterants, particularly metallic substances in candy. This clause was written into the law by the candy manufacturers themselves, and, under a recent court decision, the clause will be interpreted literally.

Under it, according to the interpretation of the court, Dr. Wiley said, nitrate of silver, tin and lead and a number of other things that are commonly used for coloring and decoration would be prohibited. This is going further than even the Bureau of Chemistry expected, but Dr. Wiley holds that the anti-metallic provision is a good thing, as it will strengthen the hands of the Department in dealing with adulterations. He said that he had come across chocolate drops in the course of his investigations that had not an atom of chocolate in them, being merely a drop of glucose paste covered with a thin layer of oxide of iron.

Moon Blindness CAN BE CURED

"VISIO" Wonderful Discovery



DISEASES of the EYE successfully treated with this NEW REMEDY.

AN ABSOLUTE CURE

for Moon Blindness, (Ophthalmia), Conjunctivitis and Cataract, Shying horses all suffer from diseased eyes. A trial will convince any horse owner that this remedy absolutely cures defects of the eye, irrespective of the length of time the animal has been afflicted. No matter how many doctors have tried and failed, use "VISIO," use it under our GUARANTEE; your money refunded if under directions it does not effect a cure. "YOU PAY FOR RESULTS ONLY." \$2.00 per bottle, postpaid on receipt of price.

Visio Remedy Ass'n., 1939 Wabash Ave., Chicago, Ill.



LUMP-JAW

Quickly and positively cured in less than three weeks with one application of

ADAM'S RAPID LUMP JAW CURE

Easy to use. Written GUARANTEE accompanies each bottle.

Don't delay but write today for free circular. Dept. 27.

H. C. Adams Mfg. Co., Algona, Ia.

WHEAT

We have a large supply of kiln-dried "Burnt Wheat", \$1.50 per 100 lbs. \$27 per ton.

This wheat is a great egg producer, being thoroughly cooked makes it very healthy and easily digested. Give us a trial order and more will follow.

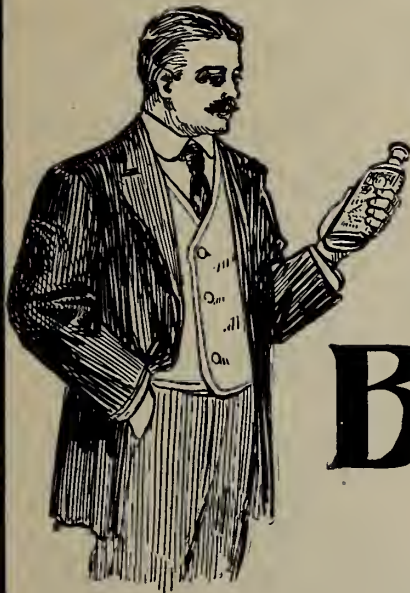
WALTER J. TODD,
 426 North Sixth St., RICHMOND, VA.
 Headquarters for Chicken Feed and Supplies.

SOUTHERN POULTRY GUIDE

This is Cal Husselman's great Poultry Book, just off press. It is freely illustrated with numerous useful and handy home-made accessories to the poultry business. It contains his 40 years' experience as a poultryman. It is the best poultry book ever printed and just what you want. It contains more plain, everyday common sense about the chicken business than you ever read. 120 pp., cloth bound. Price? We will almost give it to you. Just send \$1 and we will enter your order for the book and throw in a year's subscription to The Southern Planter.

SOUTHERN PLANTER,
 Richmond Va.

YAGER'S CREAM CHLOROFORM LINIMENT



FOR
MAN
OR



BEAST

THE UP-TO-DATE REMEDY

and the Liniment universally used by all well informed people, recognized as the most wonderful and most certain of results for use in the Home, Stable or Barn. For general use it is the best of all. Especially valuable for Rheumatism, Sprains, Aches, Pains, etc. Prevents Croup, Pneumonia and La Grippe. Sold Everywhere--25 cents.

GIVE IT ONE TRIAL—FOR MAN OR BEAST

PREPARED ONLY BY

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WILLIAMSON FARMS

MATTOAX, VA.

The Williamson Strain is the best that money and breeding can produce.

EGGS FOR HATCHING

Pure Single Comb
White Leghorns
\$1.50 PER SITTING.

Pure Rose Comb
Rhode Island Reds
\$1.50 PER SITTING.

Noted Prize-Winners head each Pen.

Eggs For Hatching.

For the next thirty days only, I will sell eggs for hatching from the high-scoring birds:

- S. C. and R. C. R. I. REDS,
- BUFF ORPINGTONS,
- SILVER-LACED WYANDOTTES,
- WHITE WYANDOTTES,
- BILTMORE BARRED ROCKS,
- BILTMORE WHITE ROCKS,
- BILTMORE BUFF ROCKS,
- CORNISH INDIAN GAMES,
- BLACK MINORCAS.

Any of the above at 80 cents for 15; or \$4 for 100.

- S. C. BROWN LEGHORNS,
- S. C. BUFF LEGHORNS,
- S. C. WHITE LEGHORNS.

Any of the Leghorn strain at 60 cts. for 15; or \$3 for 100.

My reason for selling at this marvelously low price for the next thirty days only is, my birds are laying wonderfully well this season and their output must go. No better layers to be found. Send in your orders at once.

C. H. DICKINSON,
Edgehill Poultry Yards,
LURAY, VIRGINIA.

Page Valley Poultry Farm

Has a grand lot of breeding birds, and will fill your orders with fertile eggs at the following prices:

- 15 S. C. W. or Brown Leghorn Eggs, 90c; 30 eggs, \$1.50; 15 R. C. Brown or S. C. Buff Leghorn eggs, \$1; 30 eggs, \$1.75; 15 R. or S. C. Black Minorca or Anconas, \$1.25; 30 eggs, \$2; 15 Buff Crpingtons, R. I. Reds, White, Buff, S. Lace or Partridge Wyandottes, \$1.15; 30 eggs, \$2. 15 Barred P. Rock \$1; 30 eggs, \$1.80; or \$5 per 100. 25 Barred Rock cockerels at a bargain. Order from this ad. and get my handsome catalogue of 25 varieties free.



C. L. SHENK, Luray, Va.

Pekin Ducks Toulouse Geese

EVELYN HEIGHTS FARM.

Ducks won Championship at Philadelphia, winning 2 firsts and seconds and 3 thirds.

Special May sale of White Wyandotte eggs at half price.

\$1.50 per Setting; \$7.00 per 100.

W. W. THOMAS, Prop., Catlett, Va.

White Turkeys. White Guineas

Effect of Food on Strength of Bone in Pigs.

Experiments conducted at the Nebraska Experiment Station show very marked increase in the strength of bone when tankage or ground bone is fed to pigs in addition to corn. In determining the strength of bones the two principal bones in each leg of each animal were removed and broken in a machine. There were four pigs fed in each lot, making the figures given the average of the breaking of thirty-two bones in each lot. The average breaking strength per one hundred pounds live weight of hogs after twenty-two weeks feeding was as follows:

- Lot 1, corn.....325 lbs.
- Lot 2, corn and shorts.....396 lbs.
- Lot 3, corn and skim-milk....509 lbs.
- Lot 4, corn and tankage.....580 lbs.
- Lot 5, corn and ground bone..681 lbs.

Experiments of the Bureau of Plant Industry.

The Bureau of Plant Industry, a branch of the Department of Agriculture, has been quite successful during the past season in breeding a wilt-resistant watermelon. Wilt is a serious disease in the melon belt, entire fields being destroyed. The Bureau has developed a thoroughly resistant variety which was grown last season on fifteen acres of infected land.

It has been demonstrated by the Bureau that the gumming fungus or shot hole disease of the peach can be entirely mastered by proper Bordeaux spraying. On the Pacific coast this is the worst of the peach diseases.

Some interesting experiments in hybridizing or crossing of plants is under way by the Department of Agriculture. A large number of hybrid forms of the cowpea have been raised, and these are now being tested in various parts of the country; several new crosses of the Texas and Kentucky blue grasses have been effected, and the California wild oat has been successfully crossed with several Eastern varieties. Several new hybrid lettuces are still in process of fixation. A collection of native, Chin-

IF YOU WANT EGGS

From birds of quality and don't mind paying just a little more than is asked for the ordinary—send me your orders—look up ad. in April Planter.

LET ME GIVE YOU

Prices on the following Fancy Stock: Pens of W. F. Black Spanish, White Leghorns, Black Minorcas, Buff Orpingtons, Silver Spangled Hamburgs, Black Langshan Cockerels.

CARROLL MENEFFEE,

Fancier, Sperryville, Va.
Member and Va. Sec'y National Black Langshan Club, Member American Blk. Minorca Club, R. I. Red Club of America.

STRICTLY

Fresh and Fertile Eggs.

Line-Bred Barred Plymouth Rocks, bred for winter laying, eggs \$1 for 18; \$1.50 for 36; White Holland Turkey eggs, 20 cents each; 15 cents after May 10; Toulouse goose eggs, 20 cents each; Indian Runner duck eggs, \$1 for 11; \$2 for 25. Eggs carefully gathered and packed with care. B. B. G. Bantams, 75 cents for 15 eggs. Satisfaction guaranteed. The Golden Rule is my motto.

MRS. M. F. GOOCH,
R. F. D. 1. Somerset, Orange Co., Va.

EGGS FOR HATCHING.

Baby Chicks, Mammoth Bronze Turkey from fine breeders, headed by 45-lb. tom. Grand matings in Barred Rocks, White Wyandottes, White Crpington. Eggs fresh, fertile from world's best birds. Prices reasonable. Send orders to

MISS C. L. SMITH,
Laudor Poultry Yards, Croxton, Va.

ROYAL REDS BUFF ORPINGTONS.

Eggs from choicest matings of R. and S. C. R. I. Reds and Buff Crpingtons. Best strains extant; wonderful layers; winners of many handsome prizes; \$2 per 15; \$7 per 100, also stock. Baby chicks \$3 per 15.

G. W. SWEETING, Locust Mt. Poultry Farm, Sharon, Harford Co., Maryland.

Please mention the Southern Planter.

FERN HILL POULTRY FARM

BREEDERS OF ARISTOCRATS ONLY.

Barred Plymouth Rocks, Black Minorcas, S. C. Brown Leghorns, S. C. White Leghorns

Black Minorcas winning firsts at Jamestown and Richmond, Va., Charlotte and Raleigh, N. C., Diploma and Special from the American Poultry Association for Best Minorca Cockerel in the Show, and State Championship of Va., from the American Black Minorca Club for winning the greatest number of blue ribbons in the State. Eggs \$1.50 and \$2.50 per sitting; \$7.00 and \$15.00 per 100. Birds shipped on approval.

Address **J. WALLACE SNELLING, R. F. D. 1, MANCHESTER, VA.**
(Yards, Stop 9, Richmond-Petersburg Trolley.)



ESTABLISHED 1893.

ese and Japanese persimmons has been secured from crossing. This last should prove popular work during the present administration for furnishing the necessary accompaniment to the new national dish—baked 'possum.

Small Streams are Disappearing. It is particularly noticeable to the old folks that the small brooks where they played in school days long time ago, are disappearing while larger ones have shrunk to summer threads, and rivers that filled their banks all the year are hardly more than rivulets in summer. Statistics furnished from the State of New York show that the upper Hudson in August, 1907, had no more than two inches of water where it used to roll a heavy volume. There is substantial agreement that this change has been due to the denudation of our hills and valleys of the water-holding trees. It takes a century to grow such forests as we found covering the continent; it has taken half a century to destroy them.

Moisture tests at the Oregon Station were made in which incubators were operated according to the directions of makers with the exception that moisture was used in different amounts. In the no moisture machines a tray of dry sand was kept under the eggs. The sand in the maximum moisture machines was kept wet all the time, or as wet as it could be kept without water standing on the sand. The final results showed an increase in number of chicks hatched of 32.6 per cent. by using moisture in incubators.

GUY E. MITCHELL.

Jefferson Co., W. Va., Jan. 12, '09.

The Southern Planter is growing in interest and value. I take a half-dozen agricultural papers, but give yours the preference. Your editorials are instructive and full of information.

J. S. MELVIN.

Two Well Bred Guernsey Bulls For Sale
One A Yearling, The Other 2 Years Old.

EGGS FOR HATCHING.

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| Bronze Turkey, - - \$3 for 12. | S. C. Brown Leghorn, \$1 for 15. |
| Brown Chinese Geese, \$2.50 for 12. | Rhode Island Reds, \$1 for 15. |
| Toulouse Geese, - \$2.50 for 12. | Pekin Duck, - - - \$1 for 12. |
| Barred Plymouth Rock, \$1 for 15. | Mallard Duck - - - \$2 for 12. |

Scotch Collie and Fox Terrier Pups now ready to ship

M. B. ROWE & CO.,

Fredericksburg, Va.

BLACK'S BLACK LANGSHANS

are typical LANGSHAN fowls.

THEY ARE { Carefully bred for all Standard requirements.
Also a distinct strain of great egg producers.

THEY WILL—tone up your flock.

Blood from this famous strain of Langshans will improve the general vigor of your flock and greatly increase the egg-laying qualities of your hens. Get a start this month.

Eggs \$2 for 15; \$3.50 for 30 and \$10 for 100. Some choice birds for sale. Write for circular and show winnings.

A. M. BLACK, TAZEWELL, VIRGINIA.

Glenview Orpingtons.

S. C. BUFFS EXCLUSIVELY.

I will not sell any eggs for hatching next season. If you want some of the best stock of Orpingtons in the South, BUY NOW. Prices reasonable. State your exact wants.

B. S. HORNE, Keswick Va.

BLACK

LANGSHANS

Some nice stock for sale.

JOHN C. ADAMS,

Bristol, Va.-Tenn.

WHITE WYANDOTTES.

Eggs for hatching, \$1.25 for 15, \$2 for 30.

R. ELSAESSER, Meherrin, Va.

Silver Laced Wyandottes

Eggs for hatching from choice matings at \$1 per 15. Now booking orders. Vigorous Cockerels, \$1.25 to \$1.50. Trips, \$4. Choice lot of birds to select from. Can furnish in any quantities wanted.

All stock strictly first class and healthy.

DR. H. H. LEE,

Poplar Hill Poultry Farm, R. F. D No. 4, Lexington, Va.



S. L. WYANDOTTES

Exclusively.

Finest pure-bred stock, extra winter layers. Eggs \$1.25 per 15; \$2 per 30. Safe arrival and satisfaction. Having 25 years experience with leading varieties of pure-bred poultry, I know that my WYANDOTTES are hard to beat. Circular free.



S. P. YODER,

Denbigh, Va.

S. C. WHITE LEGHORNS

100% FERTILITY GUARANTEED

THINK OF IT!

We are selling our eggs at \$6.00 per 100 and are guaranteeing, not 80 or 90 per cent. as others are doing, but every egg fertile. Write us and let us tell you what we will do to advertise our great egg producers. Same price for a less number.

Eggs for fancy matings a matter of correspondence.

STOCK FOR SALE.

B. H. GRUNDY & SON,
300 W. Franklin St., Richmond, Va.

Single Comb

White Leghorns

To reduce stock, we offer for sale 1,000 Pure S. C. White Leghorns of the very best stock in lots to suit purchasers at prices ranging from \$1 to \$1.50 each for pullets and laying hens and \$3 to \$3.50 for cocks and cockerels

Now is your chance to secure fine birds at a low price.

FOX HALL POULTRY FARM,
R. F. D. 2, Norfolk, Va.

SINGLE COMB

WHITE LEGHORNS

EXCLUSIVELY of finest exhibition strain. Prince Satin, first prize cockerel and winner of special prize for whitest cockerel, Bristol Dec. 1908, heads my pen. He is mated to 15 of the finest exhibition females, including the special prize, best shaped pullet in above show.

Eggs from this pen, \$2.50 per 15; eggs from business pen, \$1 per 15. Address:

W. S. MATHEWS,
Big Stone Gap, Va.

EGGS FOR HATCHING.

from my heavy, laying strains

**S. C. White Leghorns
White Wyandottes**

Blood lines unsurpassed and standard qualities are excellent. \$2 per 15.

SCOTCH COLLIES.

The sensible kind. Correct type. Fashionably bred.

WARREN RICE, Vacluse Sta., Va.
Frederick Co.

**S. C. W.
LEGHORNS**

D. W. Young's strain, \$3 per 15 eggs. Pine Top strain, \$2.50 for 15 eggs. General utility fowls containing my prize-winners at \$1.50 per sitting of 15 eggs.

W. R. TODD, 426 N. 6th St.
RICHMOND, VA.

HINTS BY MAY MANTON.

The breakfast jacket that is slightly open at the neck is the one which a great many women find comfortable. The model includes that feature and is absolutely simple, the sleeves being cut in one with the body portion. Just now, when washable goods are being offered in such tempting variety and a great many busy folks are employing the midwinter time for making them up, such a model will be found doubly desirable. It would be charming made from lawn or batiste, or from any one of the inexpensive printed wash fabrics, and it is also pretty for cashmere, challis and materials of the sort. In the illustration white albatross is banded with pale blue.



6219 Breakfast Jacket with Peplum,
32 to 42 bust.

The jacket is made with the side portions which are cut in one with the sleeves, the centre front and the centre back. The side portions are laid in tucks over the shoulders and are joined to the centre portions. The jacket is gathered at the lower edge and joined to the peplum, the belt concealing the seam. The closing is made invisibly at the left of the front.

The quantity of material required for the medium size is 3 1-2 yards 24, 2 5-8 yards 32, or 2 1-4 yards 44 inches wide, with 3-4 yard 32 inches wide for band.

The pattern 6219 is cut in sizes for a 32, 34, 36, 38, 40 and 42 inches bust measure and will be mailed to any address by the Fashion Department of this paper on receipt of ten cents.

Eggs for Hatching

Husselman, the Hen Man

Best laying strain S. C. Brown Leghorns; best laying strain S. C. White Leghorns, eggs \$1.00 for 15; \$6 per 100.

Pure Thompson Strain Barred Plymouth Rocks. Two pens. None better. Pens one and two. Eggs \$3 per 15.

One pen pullets from Maine Ex. Station mated to a fine large Thompson cockerel. Eggs, \$2.50 per 15.

HUSSELMAN,

Stop 26. Seven Pines Car Line
Highland Springs, Va.

Single Comb

BROWN LEGHORNS



I have bred them exclusively for years and now offer eggs from well bred stock at 75c. per sitting. Correspondence solicited.

THOS. WASHINGTON,
Woodford, Va.

We Are Now

BOOKING ORDERS FOR EGGS

White Holland Turkey, \$2 for 9
Crested Pekin Duck \$1 for 11
S. C. Brown Leghorn \$1 for 15
Buff Plymouth Rock \$1 for 15

LAUREL HILL POULTRY FARM,
Roxbury, Va.

EGGS FOR HATCHING

From pure-bred, very high grade Barred Rocks, E. B. Thompson and Gowell strains, \$1, \$1.50 and \$2 per 15, according to quality.

Also eggs from high-grade S. C. White Leghorns, \$1 per 15. Incubator eggs, \$5 per 100. Address

CEDAR HILL POULTRY FARM,
Route 1, Box 50., James River, Va.

"MAPLEHURST"

The home of choice birds—B. P. Rocks, Buff Orpingtons and S. C. R. I. Reds. Eggs for sale at \$1 for 15, \$1.75 for 30, \$2.50 for 50. Write to

T. J. THOMPSON,
R. F. D. No. 7, Staunton, Va.

SHIRLEY POULTRY YARDS.

Barred Plymouth Rocks, E. B. Thompson's celebrated strain, beautiful plumage, fine large fowls, cockerels \$1 to \$1.50; eggs, \$1 per sitting; \$1.50 per two.

Mammoth Bronze Turkeys, the finest I ever raised, bred from 40 to 45 lb. toms, strong and healthy; eggs per dozen, \$3.

Imperial Pekin Ducks. Eggs \$1 per 13, \$1.50 per 26.
MRS. R. E. WILHOIT, Somerset, Va.

**S. C. BROWN LEGHORNS,
WHITE PLYMOUTH ROCKS.**

HEAVY LAYERS.

Eggs \$1 Per 15.

WHITING'S POULTRY YARDS,
Harmony Village, Middlesex Co., Va.

Please mention the Southern Planter.

Cut Prices



Our eggs of the following varieties of Pure-Bred Poultry of highest quality that are bred to lay and pay, for balance of season to readers of the Planter:

	Per sitting
Barred P. Rock	15 \$1.10
White P. Rocks	15 1.10
Buff P. Rocks	15 1.30
R. C. R. I. Red	15 1.10
S. C. R. I. Red	15 1.10
S. C. Buff Orpington	15 1.20
S. L. Wyandotte	15 1.10
White Wyandotte	15 1.10
Columbian Wyandotte	15 1.30
Buff Wyandotte	15 1.10
C. I. Game	15 1.40
Golden Wyandotte	15 1.10
Black Langshans	15 1.10
R. C. Brown Leghorns	15 1.10
S. C. Brown Leghorns	15 1.10
S. C. Buff Leghorns	15 1.20
S. C. White Leghorns	15 1.10
R. C. White Leghorns	15 1.10
S. S. Hamburgs	15 1.10
S. C. White Minorcas	15 1.10
R. C. Black Minorcas	15 1.10
Pearl Guineas	15 1.00

Also other varieties at low prices. My big catalog tells all about poultry; feeding, care, etc. It is only 10 cents or free with an order for eggs from this ad.

JOHN E. HEATWOLE,
Box L. Harrisonburg, Va.

VALLEY FARM Barred Plymouth Rocks. (E. B. Thompson Strain.)

S. C. Brown Leghorns.



Eggs from prize-winners for sale. Write me your wants. No more stock for sale. Satisfaction guaranteed.

CHARLES C. WINE,
Mt. Sidney, Va.

SPRING BROOK POULTRY FARM

Culpeper, Va., H. H. Scott, Prop.

Breeder of Northrup strain Black Minorcas, Whitman strain of Brown Leghorns, and the best Silver-Laced Wyandottes. Six entries at Richmond and Herndon won 2 first, 1 second, 2 thirds and a club special. Eggs in season. Stock for sale.

BARRED PLYMOUTH ROCKS.

(Hawkins Strain.)

S. C. White Leghorns (Wyckoff strain), S. C. Brown Leghorns (Biltmore strain) Mammoth Bronze Turkeys, Mammoth Pekin Ducks. Stock and eggs for sale. Satisfaction guaranteed.

MARION POULTRY YARDS, Marion, Virginia.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

There is no suit better adapted to the small boy's use than the one in blouse style. It can be made from such washable material as linen, chambray, madras and the like and it can be made from plain wool materials, from shepherd's check or serge or any fabric of the sort. It is always comfortable and it suits the small boy's needs perfectly well. This model is buttoned at the right side well to the shoulders in true Russian style, and includes the knickerbockers that are so comfortable as well as so becoming.



6280 Boy's Suit, 6 to 12 years.

The suit consists of the blouse and the knickerbockers. The blouse is made with fronts and backs and finished with a neck band to which the collar is attached by means of studs. The sleeves are tucked at the wrists and the lower edge of the blouse finished with hem in which elastic is inserted to regulate the size. The knickerbockers are simple ones finished with waistbands and drawn up at the knees by means of elastic inserted in the hems.

The quantity of material required for the medium size (10 years) is

McCue's "Ringlet"

Barred Plymouth Rocks.

Again winners in strongest competition, Richmond, Dec., 1908, 1st cockerel, 3d and 5th cock, 5th pullet. Washington, Jan., 1909, 2d cockerel, 3d pullet. Most excellent layers—large, vigorous and beautiful. Good breeding cockerels \$2.25 to \$5 each.

Splendid Bargains in pullets, \$1, \$1.50 and \$2 each. Eggs from grand yards, headed by prize-winners, \$1.50, \$2, \$2.50 and \$4 per 15. You may get a prize-winner out of one sitting. Satisfaction guaranteed.

LESLIE H. McCUE,

Box 4, Afton, Va.

BARRED PLYMOUTH ROCKS

EXCLUSIVELY.

Yard headed by some world renowned prize-winning blood.

Eggs from strong, healthy, beautifully Barred, farm-raised birds, unexcelled in laying qualities, size, vigor and beauty, selling at farmers' prices—\$1.25 for 15, or \$2 for 30. Toulouse Geese Eggs \$1.25 for 6; \$2 for 12.

JOHN MAHANES, Trevilian, Va.

THOMPSON'S STRAIN

Barred Plymouth Rocks

A few nice cockerels at \$1.25 to \$2 each. SELECTED EGGS \$2 per 15. Choice young Angus Bull at \$40.

C. NEALE STACY, Amelia, Va.

BARRED PLYMOUTH ROCKS.

Eggs for hatching from Bradley and Hawkins Strain. Prize-winning cocks and careful mating—no other fowls on farm. 75c per sitting of 15—carefully packed. Send check, postal or express money order.

MRS. WM. P. BURKS, Bedford City, Route No. 1, Va.

Pure-Bred

Barred Plymouth Rocks

(Park's Strain)

S. C. Rhode Island Reds

(Piper's Strain)

These are the best bred-to-lay strains in the country. Eggs \$5 per 100; \$1 per 15.

Fred B. Jones, Gloucester, Va.

Golden Wyandottes.

A Specialty Pure bred, strong, vigorous stock, bred for winter layers.

Eggs \$1 per 15, \$1.75 per 30, \$3 per 50, \$5 per 100.

Miss Katie Thompson, Route 3, Manassas, Virginia.



EGGS, EGGS.

From Taylor's White Wyandottes. I am still booking orders for eggs. Prize pens, \$2 for 15; other pens \$1.50 for 15. Almost booked up, so send orders at once.

R. RANDOLPH TAYLOR,

Hickory Bottom Poultry Farm, NEGROFOOT, VA.

R. F. D. No. 2. Beaver Dam, Va.

Always mention The Southern Planter when writing advertisers.

**BERGER'S
White Wyandottes**

BIG Winners
Layers
Birds

Eggs, \$1.50 per 15 and
\$3. per 15

Descriptive circular
on request.

R. O. BERGER,
State Secy. Natl.
White Wyandotte
Club, Office 16 No.
20th St.,

RICHMOND, VA.



PURE-BRED R. C.

RHODE ISLAND REDS

Eggs, \$1 per sitting of 15.
Special rates for Incu-
bator Eggs.

MRS. J. A. UPSON,
R. F. D., Wellville, Va.



ROSE COMB

Rhode Island Red

Eggs from prize-winning stock. Also

Fishel Strain White Rock

Eggs for sale, 15 for \$1 or 3 sit-
tings for \$2.50.

L. E. SMITH, Appomattox, Va.

PURE-BRED R. C.

RHODE ISLAND REDS

Eggs from prize-winning
stock at astonishing
prices.

MRS. MATTHEW SMITH,
Route 1, Wellville, Va.



ROSE COMB

RHODE ISLAND REDS

EXCLUSIVELY.

Eggs for hatching from prize-win-
ning stock; an exceptionally fine lay-
ing strain.

MISS LOUISE V. SPENCER,
Blackstone, Va.

Member of R. I. Red Club.

S. AND R. C. RHODE ISLAND REDS

Columbian and White
Wyandottes; B. P. Rocks
Eggs for hatching, \$1 for
15; \$1.75 for 30; \$2.75 for
50; \$5 for 100. All stock
has free range.

Riverside Poultry Farms,
J. B. Coffman & Sons,
Prop., Route 19, Dayton,
Va.



Indian Runner Ducks

Greatest layers on earth; easy to
raise, no lice. Prize winners Virginia
State Fair and Poultry Show. Also
R. C. Reds and S. O. B. Leghorns.
Ducks sold out. Eggs in season.

MRS. B. J. GRASBERGER,
Bumpass, Va.

A Neat Binder for your back num-
bers can be had for 30 cents. Address
our Business Department.

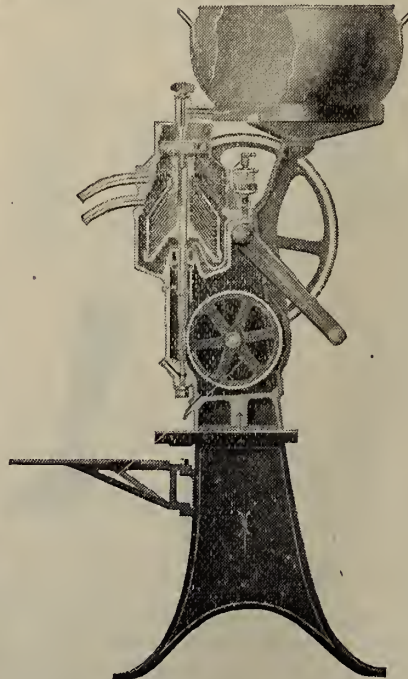
5 1-4 yards 24, 4 yards 32, or 3 1-4
yards 44 inches wide.

The pattern 6280 is cut in sizes for
boys 6, 8, 10 and 12 years of age, and
will be mailed to any address by the
Fashion Department of this paper on
receipt of ten cents.

**UP-TO-DATE IMPROVEMENTS IN
CREAM SEPARATORS.**

Cream separators come and go—
every year some new names and some
that are heard of no more—but all
appear to have little effect upon the
firmly established prestige of the
"World's Standard" De Laval ma-
chines, which were first in the begin-
ning and which their makers have
spared no effort or expense at any
time to keep in the van of all at-
tempted competition.

A year ago we commented at length
on the many and novel changes found
in the new line of Improved De Laval
machines then introduced, and now
the manufacturers say that a year's
practical experience in the actual sale
and use of the new machines has but
served to suggest a little greater re-
finement of perfection in the 1909 ma-
chines and to bring out some points
of advantage not fully appreciated at
first even by those who had designed
the new machines.



The interest in cream separators is
so great the present year, and this
wonderful implement is productive of
so much profit and convenience to
the dairy farmer, that it is worth
while to review again some of the
radical changes made in the new
1908-1909 De Laval machines.

The capacities were increased from
ten to twenty per cent., while there is
claimed to be a noticeable improve-
ment in the still more complete separ-

**WALKER'S
WHITE ROCKS.**

Took 2nd cock; 1st
and 2nd cockerels; 1st
and 2nd pullets; 1st pen
at Herndon, Va., show
Jan., 1909. Strong com-
petition. Am booking
orders for eggs. \$1.00
and \$2.00 for 15.

C. M. WALKER,
Herndon, Va.



White Wyandottes Exclusively.

Bred for business. Will please farmer
or fancier. Eggs from carefully se-
lected stock, \$1.25 per 15; \$2 per 30.
Circular free. I guarantee satisfaction.
J. H. YODER, Denbigh, Va.

RICHMOND

COLLIE KENNELS

Pedigreed Collie Puppies, sable and
white. Bred right and are right. Blue
ribbon stock. \$10. See them.

W. J. STRAIN,
Mechanicsville Farm, Richmond, Va.

WOODLAND DORSETS

We have some splendid yearling
rams on hand and can make the best
of selection; also a few very fine year-
ling ewes.

J. E. WING & BROS.,
Mechanicsburg, O.

TAMWORTH PIGS.

From Registered Stock of Fine
Breeding.

Knowle of Cook Farm 5057 at
head of herd. Sire 2nd prize boar
at Royal Show, Eng., 1907., Dam,
1st prize gilt at same show, 1907.

VOLNEY OSBURN
Blumont, Loudoun Co. Va.

O. I. C.

Pigs not akin; also boars for sale.
All eligible to registry.
D. WM. GOOD, Farland, Va.

EDGEWOOD STOCK FARM.

DORSETS

I still have some choice Nov., Jan.,
and Feb. lambs left; better this year
than ever. Will be pleased to quote
you prices. Remember my lambs are
from large strong boned ewes and
have blood from the best flocks in
this country and England. I am pre-
pared to furnish grade ram lambs
at ten dollars f. o. b. Let me hear
from you; I can please you. Address

H. H. Arbuckle,
Maxwelton, W. Va.

**Virginia's Premier Rival
117983**

A blue ribbon winner at Va. State
Fair, 1908. He is one of the Great
Boars of the Berkshire Breed, is not
only a splendid individual but has
proven himself a wonderful breeder.
His pigs are large, even size no
"runts" fine length, full of quality
with best of Berkshire heads. Anyone
in search of a top boar pig to head a
good herd, write me. My pigs are
out of large prolific sows of best
breeding. Prices reasonable and stock
must please you.

E. F. SOMMERS, Somerset, Va.



**Pure-
Bred
POULTRY**

Eggs for hatching now ready. I can supply eggs from choice matings of the following breeds: Bared, Buff and White Plymouth Rocks; White, Brown and Buff Leghorns; Single and Rose Comb Rhode Island Reds and Black Minorcas; White, Buff Silver, Golden and Columbian Wyandottes; Silver Spangled Hamburg; White-faced Black Spanish, White-crested Black Polish, Cornish Indian Game, Buff, White and Black Orpingtons, all strictly pure-bred. Pekin Duck eggs, \$1.50 per dozen, \$5 per 50 and \$8 per 100. Rouen and Muscovy Duck eggs same prices. White Holland and Mammoth Bronze Turkey eggs 30c. each, as many as you want. Address,

JAMES. M. HOBBS,
1521 Mt. Royal Avenue,
BALTIMORE, MD.



PURE-BRED SHEEP.

Farmers, now is the time to select and engage your rams and ewes for next season. I have choice pure-bred Shropshire, Hampshire, Southdown, Dorset and Delaine Ram and Ewe Lambs, yearling and two to five year old Rams and Ewes I am booking orders now for shipment when wanted and the early buyer gets pick of flock and better values than the late buyers. Write to-day, and state your exact wants and I will be pleased to name you prices that are right for the quality I have. Address

JAMES. M. HOBBS,
1521 Mt. Royal Avenue,
BALTIMORE, MD.



**Pure-Bred
HOGS**

I have fine lot of Spring Pigs of the following breeds and am booking orders for April, May and June shipment: Chester White, Yorkshire, Poland-China, Berkshire, Duroc-Jersey, and Tamworth, all of which are eligible to registry. I can mate pigs two, three and four months old in pairs and trios not akin. I have some grand sows 150 to 250 lbs. bred to farrow in May and June and some fine Service Boars from 150 to 300 lbs. and will make right prices considering the quality of the animals. Address

JAMES. M. HOBBS.
1521 Mt. Royal Avenue.
BALTIMORE, MD.

**DUROC
JERSEY
SWINE**

Best Blood. Nothing but the best individuals offered for breeders.

WARREN RICE, Vaucluse Sta., Va.
Frederick County.

TAMWORTHS.

The lean bacon hogs—pigs, bred sows, and service boars, all registered and of best blood.

BERKSHIRES.

Fine pigs and service boars entitled to registration and of blue ribbon stock. Am out of Poland-China pigs at present.

J. C. GRAVES, Barboursville, Va.

THOROUGHbred

**BERKSHIRE BOARS,
JERSEY BULL CALVES,
DORSET BUCK LAMBS.**

Sire of calves, **FLYING FOX**, 65456, son of Flying Fox, who sold for \$7,500 at the Cooper sale, 1902.

All stock in best condition and guaranteed as represented.

F. T. ENGLISH, Centreville, Md.

MEADOW BROOK FARM

FOR SALE—Choice lot of large **YORKSHIRE PIGS** males and females, not akin, from America and England's best breeding.

J. D. Thomas, Prop.
Round Hill, Va.

PREMIER BERKSHIRES

The large, lengthy, growthy kind. A fine lot of pigs, bred from first-class sows, ready for April delivery; prices right. **B. P. Rock** eggs \$1 for 15.

J. T. OLIVER, Allen's Level, Va.

ation of the butter-fat from the milk, particularly under the more difficult but frequently unavoidable circumstances of ordinary farm and dairy use.

The supply can is now low enough to meet the objection that has sometimes been made to the lifting of milk into it. It is spun from a single sheet of tin-plate so that it is seamless and absolutely sanitary, while it is globe shaped and thus avoids any splashing over of the milk.

The bowls retain, the distinctive "Alpha-Disc" and "Split-Wing" tubular shaft De Laval features, but have been scientifically re-designed, from engineering considerations, so as to involve the least air resistance in being driven and in the discharge of cream and skim-milk from them.

The bowl is more sanitary in its construction, being free from tubes, wings, orifices, or any parts which are not easily unassembled and may not be quickly and completely cleaned.

The supporting spindle now sets well up under the bowl, at the center of weight and balance. It is of the combined spindle and worm screw type, but still detachable from the bowl, the spindle always remaining in the frame where no harm can come to it. It is thus said to possess all of the advantages of both the old double and single bowl spindles, with none of the previous disadvantages of either.

The top bearing, which provides the yielding 'cushion' the bowl spindle must have, is most ingeniously simple, hardy and inexpensive. It is merely a circular bowed steel spring surrounding the bronze bushing, unaffected by wear or conditions of use and easily removed and replaced.

A new feature which appeals to

**QUALITY
Poland - Chinas.**

Lest you forget we have the best breeding and individuals in P. C. blood in Virginia at farmers' prices. Young pigs and bred sows "the best ever."

A son of the "King of Them All" at head of our herd. Write us your wants.

H. B. BUSH & BRO.,

Michaux. Powhatan Co., Va.

Registered

POLAND-CHINAS

Some choice pigs and bred sows for sale. Bred from prize-winning stock. They have good finish, heavy bone, good backs, nice head and ears, smooth coats. Sure to please. You run absolutely no risk, every one shipped on approval. Satisfaction or your money back. Could I be fairer?

W. M. JONES,

Crofton, Va.



Reg. P. Chinas, Berkshires, C. Whites. Large strains. All ages, mated, not akin. Bred Sows, Service Boars, Guernsey Calves, Collie and Beagle Pups and poultry. Write for prices and circular.

P. F. HAMILTON,
Cochranville, Chester Co. Pa.

**A FEW FINE
BERKSHIRE PIGS**

And one three year old registered boar for sale. All stock entitled to registration. You can get the best at farmers' prices.

W. C. SHACKELFORD, JR.,
Route 1, Proffit, Va.

CHESTER WHITES.

Best hog on earth. I am now booking orders for spring pigs. Please let me have your orders. Satisfaction guaranteed.

S. M. WISECARVER, Rustburg, Va.

PUBLIC SALE

MAY 27, 1909

Short Horns, Draft Colts Poland-Chinas

At Silver Spring Farm, three miles from Rippon (N. & W. R. R.) Jefferson County, W. Va.

Parties will be met at train on sale day or if notified will be met and entertained the day before.

The offering consists of 22 Short-horns, grandsons and granddaughters of Choice Goods, a great show and breeding bull, also grandsons and granddaughters of Imported Scotsman and British Flag. There are some fine bulls and a useful lot of heifers most of which are under 15 months old and are of my own breeding. Several of the bulls are extra good.

Twenty colts, most of them are one-half to three-quarter Percheron; 8 are two years old and 12 are one year old. Six of the two year olds are heavy and good to work some. The year olds are a fine lot and there are several that will make large brood mares.

Fifteen Poland-China Hogs. In the offering are boars old enough for service and three sows all eligible to registry.

Will also sell two fine Shropshire Ram Lambs from Wardwell ewes.

There will be no protection put on this stock. You get it at what the public thinks it is worth. I know it is profitable to breed pure-bred stock and naturally hope that the public will put a fair valuation on my offerings.

Twelve months will be given on approved notes with interest from date. Catalogues after May 15th.

ROBERT R. SMITH,

Charles Town, W. Va., or Wickliffe, Va. Station Rippon, N. & W. R. R. Mention Southern Planter when writing.

HEFFLEBOWER & WEST, AUCTIONEERS

REDLANDS FARM RED POLLED CATTLE

One splendid registered yearling; three fine bull calves, eligible to registry.

Three specially fine pure-bred

SHROPSHIRE BUCKS

2-year-olds; eight yearling bucks; one registered buck, very fine.

Address:

AARON SEAY, Manager,

Carter's Bridge,

Albemarle Co., Va.

TWO

JERSEY BULLS

FOR SALE.

One dropped Feb. 1st, 1908, son of Coquette's John Bull and Deccalora's Maiden—a five gallon cow—fat, good size, and entitled to registry.

Price \$50

One sired by Flying Fox's Cash, a grandson of Champion Flying Fox, and out of Lady Cook, a granddaughter of Champion Flying Fox.

Price \$50

A. R. VENABLE, JR., Farmville, Va.

every housewife is the drip shelf coming between the frame and the stool and catching any oil or overflow of milk and water that might otherwise run to the floor.

In the reconstruction of the machines every part has been carefully designed with reference to its extreme simplicity, not only of itself, but in its assembling with the other parts with which it must fit, and it is said that the new machines have been completely unassembled down to the last part within five minutes of time, by persons who had never touched a separator before, and then completely reassembled again within ten minutes without the slightest trouble.

The new machines have been the subject of much favorable comment by Experiment Station and other authorities and many experienced users of separators have come to appreciate some of the difficulties they had to contend with before and some of the new features which it seems hard to be without once it is known that they can be had.

More than 15,000 users of old machines—various other makes as well as antiquated De Laval—are said to have availed during 1908 of the small trade allowances which the De Laval Company makes for such old machines, and it is confidently expected that a still larger number will do so this year.

The accompanying sectional view of one of the machines illustrates some of the new features mentioned.

NEW WORLD'S RECORD BUTTER COW.

The milk of the Holstein cow bearing the name below given was tested for butter by a representative of the Cornell University Experiment Station, Ithaca, N. Y., during the latter part of March, 1909, and by the Babcock test showed a yield in seven days of 28.44 pounds of butter fat. As such records are commonly stated by the Herd-Book Association this yield of butter fat is equivalent to 35.55 pounds commercial butter at 80 per cent. fat.



World's Champion Cow, 35.55 lbs. Butter in 7 days
Trace Fayne Zad's Homestead, Pure Bred Holstein

This yield exceeds that of any other cow tested under the present scientific systems in use at Experiment Stations, which are to-day the

Fairfield Farm, NOKESVILLE, VA.



REGISTERED BERKSHIRES, S. C. WHITE AND BROWN LEGHORNS Indian Runner Ducks

WRITE US YOUR WANTS.

Devon Herd Established 1884. Hampshire Down Flock Established 1880.

DEVON CATTLE

BULLS AND HEIFERS,
HAMPSHIREDOWN SHEEP,
RAMS AND EWES.

ROBERT J. FARRER, Orange, Va.

Ingleside Herefords

Polled and standard bred—200 head in herd. All ages, both sexes. Write for catalogue and prices. Inspection invited. Farm near Alderson, W. Va., on C. & O. R. R. Address.

S. W. Anderson, Blaker Mills, W. Va.

VALLEY FRONT FARM.

Sassafras, Gloucester Co., Va.

I have a nice lot of registered Hereford Bulls and Heifers, for sale at farmers' prices. Also a number of grade Heifers and cows. My herd represents best strains and choice individuals.

Wm. C. Stubbs, Prop.

Elkton Stock Farm

Breeders of pure-bred, registered Hereford Cattle and Berkshire Hogs. Young stock for sale at all times at reasonable prices. All statements and representations guaranteed.

Forest Depot, Virginia.

JERSEYS

Combination and Golden Lad. For sale 46 Cows, 6 Heifers, 25 Bulls.

S. E. NIVEN, Landenberg, Pa.

Please mention the Southern Planter.

Glenara Stock Farm

OFFERS
FOR IMMEDIATE DELIVERY
SHORT HORNS

8 dual-purpose Short-Horn Cows, imported from Canada, all bred or with calves at foot, to Bessie's Lad, No. 273945. Prices from \$60 to \$100.
1 aged dual purpose bull, price \$75.
3 Short-Horn yearling bulls, price \$50 each.
4 Short-Horn yearling heifers, price, \$50 each.

DORSET SHEEP

2 aged Dorset rams, price, \$35 each.
2 yearling Dorset rams, price \$30 each.

POLAND-CHINAS

15 Poland-China boar pigs, winter farrow, Price \$15 each.
15 Poland-China gilts, price \$15 each.

FOR MAY AND JUNE DELIVERY

CLYDESDALE

1 yearling Clydesdale Stallion, by imp. "Evander," 1st and champion at Aberdeen, Scotland, 1st and Reserve champion at Chicago International, out of imp. "Lanark Queen," winner of 25 1sts and championships in Scotland and 1st and champion at the Chicago International. Price \$600.
1 yearling Clydesdale Stallion, by imp. "Evander," (see above) out of "Thorncliffe Duchesse" 1st at the Chicago International. Price, \$500.

DORSET SHEEP

15 Dorset ram lambs, by imp. "Romulus 2nd," 1st in England, and 1st at the Chicago International, out of ewes imported from Canada and England, many of them prize-winners. Prices, \$15 to \$25.

POLAND-CHINAS

Poland-China Boar Pigs and gilts of spring farrow, sired by the first and champion boar at the Virginia State Fair 1908, out of sows imported from the most fashionable western families. Price at weaning time, \$10 each. Registration papers furnished with all stock. All shipments will be sent collect on receipt of check or money order, but all buyers may return any purchase with which they are dissatisfied at my expense and their purchase money will be refunded.

Place your orders now. These are Farmers' Prices.

JOHN BUTLER SWANN,
Marshall, Fauquier Co., Va.

ROCK SPRING FARM
Offers for Sale
REGISTERED GUERNSEYS

of the best strains; Registered Duroc and Berkshire Swine; Breeding stock and eggs from B. Rocks, Pekin Ducks, White Holland Turkeys and Guineas
H. T. HARRISON, Prop. Leesburg, Va.

Walnut Hills Herd.

Twenty-five Registered Angus females and two bulls for sale.
J. P. THOMPSON, Orange, Va.

only true tests, and is a wonderful example of the capacity and development of cows of this famous breed of dairy cattle. The previous high record was held by a Holstein cow owned by Wisconsin breeder, and New York State now claims the champion cow of the world, owned and developed in Syracuse, by Mr. H. A. Moyer.

This cow exhibits to a great degree the characteristic vigor of the Holstein. Her last test was begun when she was six years, 23 days old, and showed about 5.42 per cent. fat. She was the champion four year old of 1907, testing 29.16 pounds in seven days and 119.22 pounds in thirty days. As a five year old she tested 30.55 pounds in seven days and 126.68 pounds in thirty days.

F. L. HOUGHTON,
Secy. Holstein-Friesian Association
of America.
Brattleboro, Vt., April 15, 1909.

GOOD HOUSEKEEPING.

Roaches, Flies, Ants and Mosquitoes.

Since all the world seems alive to the necessity of stamping out these pestiferous insects, it may not be out of place for us to give a few hints from our own experience with simple remedies, hoping that they will be a help to some who are out of the reach of the more scientific methods. For years our kitchen, cellar and store-room were overrun with great black bugs, which we called roaches, but others called them water bugs. Whatever they were, they were the cause of great loss as well as the greatest discomfort. We tried everything we could think of or hear of, but the bugs seemed to wax fatter on each experiment, till one day we saw on a scrap of paper that "Borax, if used in sufficient quantities, would kill roaches." We had tried borax in small quantities, with no effect, but, being desperate, we concluded to "try again." We bought ten pounds, giving, I think, six cents a pound for it. We spread it an inch thick on shelves, tables, biscuit block window sills and along the walls, under wood boxes, wherever we knew that the bugs were, and we left it there for two days, then we cleaned up and we found that we were free. Not a bug was to be seen, and they never seemed to want to come back. We had the same fight in another house and conquered in the same way, so there is no doubt that if you use enough of it that Borax will exterminate bugs of this kind. With ants we had had very little experience until we went to spend two winters in the far South. There they were into everything. It was a continual struggle to serve any dish without its large per cent. of the miserable little insects. It was discouraging in the extreme to take up a handful of sugar and have half of it scamper away in the form of such tiny white thing as

GALLOWAYS

Registered stock of both sexes for sale.

No orders taken for bulls except calves for future delivery.

Cows and heifers, all ages.

Sold on approval. I take all risks.

Prices moderate.

Built like hogs, fatten like hogs. and make fine robes.

N. S. HOPKINS
Gloucester, Va.

RED POLLS

Will Virginia and North Carolina farmers be convinced that these are the cattle for them? Write for photos and records. We will interest you. Second prize bull at last International now at head of herd. Two prime cows now ready. Most any time you can buy a calf.

H. B. ARBUCKLE,
Maxwelton, W. Va.

Please mention the Southern Planter.

Red Poll Cattle

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One bay mare, 9 years old, weight 1,200 lbs., height 16½ hands. A reliable worker everywhere and a good driving animal.

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For Sale: 4 year old Chestnut Stallion, 1st. prize as a 3 year old; three 2 year old Stallions; some fine fillies, elegantly bred, by such horses as Matchless Dane and Bagthorpe Sultan.

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A standard-bred Kentucky Stallion. A Futurity Race Winner. 2 year old trial 2:26, splendidly bred, grandson of Geo. Wilkes.

Even common mares bred to a horse of this kind find ready sales as drivers and roadsters.

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BIRCHLAND FARM, News Ferry, Va.

Send us your orders for Aberdeen-Angus calves. Some beauties on hand now.

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Four years old, well bred and well matched, weight about 1,000 lbs., 16 hands high, drive nicely, perfect beauties. Write

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to be almost invisible. Then, there were the red ants; the larger, black ants, and the very large brown ants. All seemed to feel equally at home with us and our possessions, until we felt that with them in the house life was hardly worth living. I made experiment after experiment, but with little result, the more I killed the more there seemed to kill. One day I was bewailing the fact when an old Creole told me that she had a remedy. If I would soak some good big twine in a solution of Corrosive Sublimite and tie it on the legs of everything that it would do the job. I took her advice and not only tied it on the chairs and table legs, I tacked it along the walls, tied it around the supports of the back porch and about the pillars, and I was happy beyond expression to find myself free from ants. I have tried this time and again with the result of always doing away with any trouble from them. The trouble is small, there is no danger, and the cords need not be renewed more than once a year.

With flies, the only hope is eternal vigilance. The sticky papers are disgusting; the slow poisons make life a burden, yet both are efficacious. But the Persian insect powder will be found equal to the occasion, if rightly applied. At night, when you are shutting up the house, carefully cover the furniture, etc., in the dining-room and kitchen, arm yourself with a large palm-leaf fan and a box of powder, shut the door, hold your breath, sprinkle a part of the powder on the fan and fan upward vigorously, repeat until the air is thick with the powder; then shut the room up as closely as possible and leave it till morning. As soon as you can sweep up the flies, which are not dead but choked, and dump them into the fire. They come to life in the air. If you persist you will have a flyless, which means a comfortable summer.

For mosquitoes, kerosene seems to be all that is needed. A few table-spoons on the places where there is any still water will kill the eggs and prevent them entirely.

There is one other nuisance which makes for discomfort in the warm weather; that is the moths, which are attracted by our lights and open windows. If the whole family would keep an eye open for every caterpillar's web and burn it before it begins to be alive we would have fewer moths and more peaceful evenings. The children of the family might receive some small payment for destroying them.

Potato Yeast.

Buy a yeast cake; put it in soak for several hours; grate eight large potatoes; pour four quarts of water on them, and let them boil until done; set this aside to get cold; When it is cold add one cup of sugar, one cup of salt, and the dissolved yeast cake; stir it all well and keep

(Continued on page 528.)

Dick Wilkes Jr.

The perfect horse and blue ribbon winner at the State Fair. By Dick Wilkes, 2:11, by Centinel Wilkes, he by George Wilkes, by Hambletonian. Dam Morgan Black Hawk Pet, and granddam sired by Ethan Allen, Jr., by Hill's Black Hawk Fan.

PILOSO 102,

16 hands high; the only imported Catalonian Spanish Jack in this section.

This Jack's papers show the American Consul's signature and stamp. This stallion and Jack mark their get wonderfully.

Terms \$5.00 cash at the time of service; balance \$10.00 when mare proves in foal.

Visiting mares cared for by the week, month or year, accidents at owner's risk.

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Dr. JOHN D. MASSENGILL,
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IMPOSSIBLE.

In a certain town are two brothers who are engaged in the retail coal business. A noted evangelist visited the town, and the elder brother was converted. For weeks after his conversion he endeavored to persuade his brother to join the church. One day he said to him: “Why can't you, Richard, join the Church, as I did?”

“It's all right for you to be a member of the Church,” replied Richard, “but, if I join, who's going to weigh the coal?” —Lippincott's.

MERELY LOCAL.

Young Thomas, afflicted with a green apple pain in his midst, thus explained his condition to his mother: “Mother, I've got an awful bad pain right in the middle of my stomach, but the rest of me feels fine.”—Lippincott's.

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Rates 2 cents per word. Cash with order. Initials and figures count as one word; 25 cents minimum charge.

POULTRY, ETC.

RINGLETS SINCE 1895. WE CAN SELL you strictly high-class eggs from exhibition Ringlet Barred Rocks, the kind you can't equal for less than double, either cockerel or pullet matings, 15 for \$3; 30 for \$5; from grand utility birds \$1 for 15; 50 for \$3. We positively guarantee fair hatches and strictly high quality. Monroe Grove Poultry Farm, Aldie, Va.

EGGS, STRICTLY FRESH FROM farm raised birds, Mammoth Bronze, White Holland and half wild Turkeys, \$2.25 per 9; after May 20, 20 cents each; B. P. Rocks, \$1 for 15; \$1.50 for 32; \$5 for 100; M. P. Ducks \$1 for 11; \$1.50 for 23; White African Guineas, \$1 for 15. Well packed. Satisfaction guaranteed. Blue Hill Poultry Yards, Somerset, Orange Co., Va.

WHITE PLYMOUTH ROCKS, SILVER Laced Wyandottes, Rhode Island Reds two months old, 50 cents each and eggs \$1 for 15. Purina chick feed, incubators and brooders. Drury B. Baskerville & Bro., Salem, Va.

FRESH EGGS FOR HATCHING—Indian Runner Duck eggs \$1 for 11; \$1.75 for 22; White Holland Turkey eggs from 2 year old hens, 20 cents apiece, after 15 May 15 cents apiece. Line-bred Barred Plymouth Rock eggs, \$1 for 15; \$1.50 for 38 eggs; Toulouse goose eggs, 20 cents each. White African Guinea eggs, \$1 for 15. Eggs carefully selected and packed securely, satisfaction guaranteed. Ingraham Poultry Yards, Somerset, Orange Co., Va.

BARRED PLYMOUTH ROCKS (CY-phers and Thompson strains) eggs from pens containing birds with egg records of 120 to 175 per year. \$1.50 and \$2 per sitting of 13. Cocks heading \$2.00 pens are exhibition birds from egg laying strain, fit to show in any company. Satisfaction and a fair hatch guaranteed. Mountain View Poultry Farm and Kennels, Glenvar, Va.

INDIAN RUNNER DUCKS — MY Ducks come from the best duck breeders in the United States. My birds have free range and their eggs last season ran high in fertility and hatched vigorous ducklings. Eggs alone for sale, 11 for \$1; 50 for \$4; 100 for \$7. W. W. Henry, Jr., Broad Run, Fauquier Co., Va.

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STRICTLY FRESH AND FERTILE eggs. Mammoth Bronze, and White Holland Turkey eggs 25 cents each; Lin-bred Barred Plymouth Rocks, \$1 per 15, \$1.50 per 30; Large Pekin Duck eggs, \$1 per 11, \$1.50 per 22. White African Guineas, \$1 per 15. Write for reduction prices after May 20th. E. F. Sommers, Somerset, Va.

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ROCKLAND POULTRY FARM—BAR-gains in eggs. From high-class, improved stock. Barred Plymouth Rocks, 35 for \$1.50; 50 for \$2; \$4 per 100. All eggs carefully selected and well packed. Another great bargain. Three splendid pure-bred Jersey heifers. A profitable investment for any one interested in high class butter. Prices reasonable. Correspondence solicited. Mrs. Keese Brookings, Somerset, Va.

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INGLESIDE POULTRY YARDS—PAR-tridge Wyandottes exclusively. Winners at Virginia State Fair and Virginia Poultry Association. Eggs \$1.50 per 7. White Pekin Ducks, winners at Virginia State Fair, \$1.50 per 11. O. L. Ligon, Sabot, Va.

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INDIAN RUNNER DUCKS—CHOICE ones in lots of four, \$5. One lot \$3.25. All mated, not akin. Eggs \$1 and \$1.50 for 15 according to matings. Meadow Grove Farm, Ivy Depot, Va.

YOUELL'S WHITE WYANDOTTES. Can sell you eggs from pens scoring 93½ to 94½ points. Good layers. Square dealing my motto. Write for prices. J. C. Fishel world's best strain. Mrs. J. A. Youell, Big Stone Gap, Va.

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IF YOU DESIRE TO PURCHASE thoroughbred eggs for sitting, read the ad. of C. H. Dickinson, Luray, Va. This offer will surely close after thirty days from May 1, 1909. Edgell Poultry Yards.

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MAMMOTH BRONZE TURKEY EGGS \$3 per 15. Buff Orpington \$1 per 15; Pekin Ducks \$1 per 12. We handle nothing but pure-bred stock of the very best strains. Place your orders ahead. B. O. Poultry Yards, Route 1, Rapidan, Va.

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THE EDGEHILL POULTRY YARDS of Luray, Va., will continue the cut price on all thoroughbred eggs for sitting for thirty days longer from May 1, 1909.

FOR SALE—PURE BRED SINGLE Comb Brown Leghorn Eggs; this season, 60 cents for 15; can furnish any number. Mrs. R. Kent Cassell, Wytheville, Va.

EGGS FOR SALE FROM PURE-BRED Silver-laced Wyandotte fowls. Prize winners 1907 and 1908 at Rd., Va., \$1 for 15 eggs; \$5 per 100. Miss Phaup, Pilkinton, Va.

WHITE HOLLAND TURKEY EGGS for delivery after May 10th \$1.50 for 10; \$14 for 100. Turkey hens, \$3. Other eggs at April prices. G. W. Moss, Guineys, Va.

EGGS—BUFF WYANDOTTES. S. C. White Leghorns, also few White Orpingtons, \$1 setting. Fine healthy stock. Satisfaction guaranteed. T. M. King, Hagan, Lee Co., Va.

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PURE-BRED RHODE ISLAND REDS, Rose and Single Comb Cockerels for sale. Eggs for hatching, \$1 per 15; \$1.75 per 30. Elkton Poultry Farm, Elkton, Va.

POULTRY, ETC., (Continued).

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"REDS" BOTH COMBS FOR SALE at a sacrifice now for bargains. In stock as good as the best. State wants. Egg prices reduced. W. Shook, McGaheysville, Va.

EGGS FOR HATCHING. WHITE Rocks exclusively. Fishel's direct. Pen No. 1, \$2.50 per 15; Pen No. 2, \$1.50. Brooke B. Gochnauer, Upper-ville, Va.

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EGGS FROM PURE-BRED R. C. Rhode Island Reds. \$1 for 15. J. J. Gilliam, Farmville, Va.

EGGS FROM PRIZE-WINNING BLACK Langshans. Extra fine birds, \$1 per 15. Mrs. S. F. Bladgett, Farmville, Va.

SILVER SPANGLED HAMBURG EGGS from fancy stock, \$3.50 per hundred. Carroll Menefee, Sperryville, Va.

EGGS FROM PRIZE-WINNING BLACK Langshans. Extra fine birds, \$1 per 15. Mrs. S. F. Bladgett, Farmville, Va.

WHITE WYANDOTTE EGGS FOR sale, \$1 per sitting of 15. George Osborne, Hurlock, Md.

WHITE WYANDOTTE EGGS FROM pure-bred, prize-winning and trap-nest stock. Sitting 15, \$1. Jno. Stokes Prop. Farmville Poultry Yards, Farmville, Va.

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BERKSHIRE PIONEER POULTRY Yards, offer Golden Penciled Hamburgs, White Crested Black Polish, 13 eggs, \$2; Salmon Faverolles, 13 eggs \$3. Silver Spangled Hamburgs, Partridge Wyandottes, Golden Seabright Bantams, Cornish Indian Games, Pearl Guineas, White Guineas, Pekin Ducks, Indian Runner Ducks, 13 eggs \$1. Circular. A. E. Parsons, Berkshire, N. Y.

BLACKIE, SUNSHINE AND TRILBY Tecumseh and grand lot of Poland-China Pigs. I have bought these two sows. Blackie is three and Trilby is two years old, and they have just farrowed twenty beautiful pigs. I never saw two finer sows than they are. Can mate pigs not akin at \$20.00 a pair at eight weeks old. Pedigree furnished with every pig. Thos. S. Turner, Dickens, Va.

FOR SALE—A REGISTERED RED Polled bull, 13 months old, also a roan Shorthorn, registered, 12 months old. Both are fine animals and are good enough to show and win, and are guaranteed tuberculin tested. Price \$60 each. Thomas Bayes, 200 W. Woodruff Ave., Columbus, Ohio.

LARGE WHITE YORKSHIRES—SER-vice boars, sows, gilts, pigs of both sexes. Our Yorkshires have been carefully bred and selected for beauty as well as quality. They must please you or your money will be refunded. Meadow Grove Farm, Ivy Depot, Va.

REGISTERED BERKSHIRE PIGS, none better. Longfellow, Lord Premier and Blenheim blood, Jersey Cattle. Prices and treatment right. Clarmont Farm, Chas. P. Macgill, Proprietor. Address Chas. and W. D. Macgill, Mgrs., Pulaski, Va.

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TWO ANGUS BULL CALVES, EN-titled to registry, fine ones, now ready. Price very low. C. T. Johnson, Beaver Dam, Va.

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WILL EXCHANGE TWO WORK mules for Brood Sows, pigs and poultry. Garrett, Arcade Building, Norfolk, Va.

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WANTED—A POSITION OF TRUST and responsibility on a gentleman's estate or farm, where integrity and faithfulness are more required than experience, by a physician, who gives up practice because of poor health. Some experience with horses, poultry and bees. Best references. Dr. A. care Southern Planter.

WANTED—POSITION AS MANAGER of gentleman's estate, practical farmer and manager of all kinds of stock, highest references as to character and ability here and elsewhere. A. Longborough, Leesburg, Va.

WANTED—A SINGLE LADY PARTNER of good character, between 20 and 35 with some means, who is fond of animals and rural life. Address, giving full description. Miss Chlie Cromwell, Lexington, Va.

WANTED — MARRIED WORKING foreman on stock farm four miles from Richmond; give references and salary expected. P. O. Box 555, Richmond, Va.

WANTED—AT ONCE, POULTRYMAN; must be a Southern man and single. One who understands his work and willing to work. State terms. J. S. Carr, Durham, N. C.

WANTED FOREMAN ON FARM—must understand low grounds. State salary expected, references, experience, age. F. care Southern Planter.

WANTED—A MAN AND WIFE TO farm for bachelor and do housework for him. Address Box 31, Sowego, Va.

SEED, PLANTS, Etc.

NICE BRIGHT SOJA BEANS FOR sale. Price \$1.10 per bu. Also Cow Peas, \$1.25. Samuel A. Windley, Lake Landing, N. C.

MISCELLANEOUS.

WANTED—TO BUY ALL KINDS Wild Birds and Animals, particularly Tame Deer, Wild Turkeys, White Squirrels, Peafowl, Otters, Red Foxes, Gray Squirrels, Partridges, Pheasants, Beaver. State price when writing. Dr. Cecil French, Naturalist, Washington, D. C.


I HAVE \$4,500 STOCK IN THE Window Glass Factory in Clarksburg, W. Va., and a \$4,000 dwelling house I would like to trade for a farm of same value near Richmond, if possible. Will furnish description on application. Jules Mayeur, South Charleston, W. Va.

FOR SALE—ONE PENNSYLVANIA riding cultivator, complete. In first class condition. Price \$15. F. E. Winkler, Cedon, Va.

FOR SALE—ONE NO. 5 GEISER Threshing Machine with Farmers' Friend Wind Stacker. Only used three seasons, in first-class condition. Will sell cheap to quick buyer. Box 192, Richmond, Va.

FOR SALE—JOHNSTON DISC Cultivator and Harrow combined. Used one season. A bargain. E. M. Harnsberger, Crange, Va.

THRESHING MACHINE FOR SALE. A new (never used) J. I. Case, 18x 22in. steel encased wheat thresher, separator and cleaner in our hands for sale. Price \$175. A great bargain. Ashton Starke, Richmond, Va.

WOODWARD & SON, RICHMOND, VA.

 Lumber, Laths Shingles, Sash, Blinds, Doors, Frames, Mouldings, Asphalt Roofing. Yards and building covering ten acres.

FOR SALE—SQUARE MAHOGANY Piano as good as new. Price \$40 or will exchange for pure-bred S. C. W. Leghorn hens. P. J. Boelte, News Ferry, Va.

COSTS THE STATE 1,000 LIVES A YEAR—MORTALITY FROM TYPHOID FEVER.

State Health Department to Wage War This Year.

Richmond, Virginia, April 20, 1909, (Special).—At least 10,000 cases of typhoid fever and 1,000 deaths a year in Virginia. These are startling figures given out by the State Health Department in announcing the beginning of a crusade against fever during the coming summer.

In explaining these figures, the Health Commissioner said, "There is really no way of telling just how many cases of typhoid fever there are every year in Virginia, because there is no law that requires physicians to report their cases, or even to record their deaths, but, upon the lowest possible estimate, there must be 10,000. The deaths from these cases cannot be less than 1,000. Fearful as these figures appear, they seem much worse when it is remembered that by far the greater part of these cases can be prevented altogether."

The State Health Department will make every effort during the coming summer to enlist the co-operation of all local and county Boards of Health in stamping out typhoid fever. Every epidemic that appears in the State will at once be investigated by representatives from the State Board, and every precaution will be taken to prevent the spread of the disease. "If the people of the State will really take up this question in earnest, we can reduce our mortality from typhoid fever by at least seventy-five per cent." declared the Commissioner this evening.

Madison Co., Ky., Feb. 13, '09.

I read a large number of the best agricultural papers, but I think none of them are as helpful to the people of the middle south as the Southern Planter. S. L. CLARK.



Ft. Lewis Stock Farm

THE BEST PLACE FOR BLOOD AND REGISTERED
BERKSHIRES

White Leghorn, all breeds of Plymouth Rock, Black Minorca and Rhode Island Red Fowls. Eggs from these pure-blooded birds for sale.

DR. W. L. NOLEN, PROPRIETOR, SALEM, VA.



in a warm place until it works well, then shut it up in glass jars and keep as cool as possible. A cup and a half of this to a gallon of flour makes good bread. Never make your yeast with old yeast more than twice; it pays better to start with a new yeast cake every time.

For every day rolls, we use a gallon of flour, a dessertspoon of salt, a tablespoon of sugar, one of lard, and a cup and a half of yeast. Work a long time at the making up; grease well and put into a stone jar to rise. At three o'clock it is made out into rolls, keeping the hands well greased; put the rolls in a warm place and half an hour before supper run them into a hot oven and bake half an hour or more. Go over the rolls twice with little lard or cream. Use a mop.

Ground Ham and Eggs.

If you have some lean scraps of cold ham left, you may make a very nice dish for tea with it. Grind it and season with celery seed, pepper and a small quantity of mustard. Boil a dozen eggs very hard; mash them fine with a fork and mix them in with the ham; garnish the dish with lettuce leaves or parsley.

Lettuce Dressing.

One cup of strong vinegar, one teaspoon of salt, two tablespoons of sugar, one teaspoon of mustard, one teaspoon of celery seed, a dash of pepper. Mix all these and put on the stove; when it boils pour it over two eggs which are well beaten; add a tablespoon of butter; set it back to thicken and then let it get cold. Thin it out with a cup of cream. If the cream is sour it will make no difference; beat it well before putting it in. By adding more butter and salt, this is as good a dressing for potato salad as you can find.

CARAVEN.

THE NEW MARKET BATTALION, Mary Washington.

The month of May brings to our remembrance the famous battle of New Market, which occurred on the 15th of May, 1864, and the glorious charge of the V. M. I. cadets, which was so largely instrumental in deciding the fate of the day. Of all the events of the Civil War, none was so fraught with interest, pathos and romance as this, and each successive year adds increasing lustre to the memory of these boy heroes, till now the charge of the cadet battalion at New Market has grown almost as famous in the pages of history as that of the six

GLENBURN BERKSHIRES.

Herd headed by Lord Premier 3d, 96773, Predominant 94342 and Eminent Premier 118253. Lord Premier 3d is a great son of Lord Premier 50001 and a brother in blood to Lord Premier's Rival. Predominant is a very handsome son of the grand champion Premier Longfellow 68600 and Eminent Premier is a grandson of both Lord Premier and Masterpiece. Our sows are bred along the same lines and are superb individuals.

Also Forfarshire-Golden Lad Jerseys. Write for catalogue.

DR. J. D. KIRK,

ROANOKE,

VIRGINIA:

CHOICE BERKSHIRE PIGS of the BEST BLOOD and QUALITY

If you want a pair or trio of pigs from the best and most prolific strains of Berkshires, write me. My sows are of the best blood of the breed, being daughters and granddaughters of Premier Longfellow, Baron Duke the 50th, and the noted Huntress.

Their litters are by my great herd boars, Hunter of Biltmore 3d, and Earhart's Model Premier.

These boars are a big, fancy type, are of the best prize-winning blood of the world and their pigs are the kind that will make you money.

Let me quote you prices on first-class pigs and ready-for-service boars.

I ship everything subject to your examination and approval and my prices are reasonable. Address,

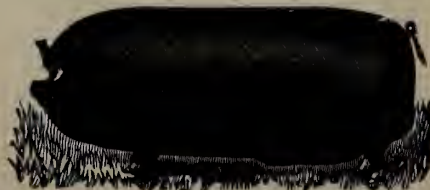
D. E. EARHART, Bristow, Va.



For Sale BERKSHIRE GILTS JERSEY BULL

Forest Home Farm,
Purcellville, Va.

Berkshires For Sale.



One of the best herds in the East.

Bred Sows, Gilts, Young Boars and
igs for Sale.

All stock shipped as represented or
money refunded.

W. R. FENSOM,
Richmond, Va.

MANNSFIELD HALL FARM

THE PROPERTY OF R. CONROY VANCE, ESQ.

FOR SALE JERSEY BULL CALF
DROPPED DECEMBER 31st. 1908

By Imported **STOCKWELL 75264**

out of Terosinia 206500.

STOCKWELL was sold for \$11,500 at public auction two years ago, and this last month he was again sold at public sale for \$7,000. Price of this calf \$75.00.

LARGE YORKSHIRE SWINE

Young boars from prize Registered Stock for sale from \$7.50 to \$15.00. Large Registered Boar from Imported Stock used on Farm for 18 months, for sale at farmer's price.

☛ For particulars apply

THE SECRETARY
MANNSFIELD HALL FARM Fredericksburg, Va.

Birdwood Farm Percherons

IMPORTED AND HOME BRED MARES AND STALLIONS

We have the right kind; big, heavy-boned horses.

Our stud includes mares up to 2,200 pounds in weight.

Come and select what you want. Salesman always on the farm.



GAULATTE 48947 (71858) 1st prize 2-year-old mare, International 1908.

**YEARLING COLTS,
MARES OR STALLIONS**

AT

\$200 to \$300

PRICES ON MARES

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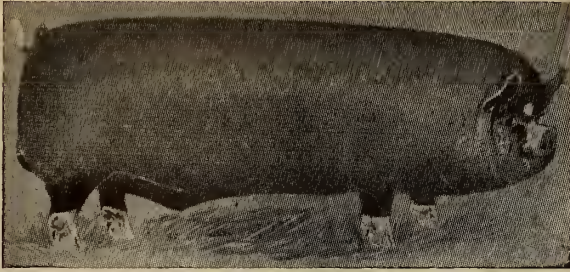
\$375 to \$1,000

COLORS

BLACKS & GREYS

All Stock Registered
in Percheron Society of America

BIRDWOOD STOCK FARM, Birdwood, Albemarle County, Va. [2 MILES WEST OF CHARLOTTESVILLE]



WOODSIDE BERKSHIRES

EVERYTHING SHIPPED ON APPROVAL.

IT WILL PAY YOU TO READ THIS CAREFULLY.

We are now offering a grand lot of Pigs
for May delivery.

These pigs are sired by our three great boars, Charmer's Premier 94553, 2 years old, weight 720 lbs., Master Lee 79379, weighing over 700 lbs. and Lustre's Carlisle 72057, and out of royally bred sows weighing from 500 to 600 lbs. each.

We can always furnish pigs not akin. In order to show our confidence in what we offer and insure satisfaction to our customers, we ship on approval. You need not send check until after you receive the pigs, and if they are not entirely satisfactory in every respect, you can return them at our expense and it costs you absolutely nothing. We leave it to you whether this is a fair proposition. Address

WOODSIDE STOCK FARM, R. S. Farish, Prop., Charlottesville, Va.

hundred at Balakhava. It was equally as brave, though more successful. Even amid the strenuous rush and excitement of the late inaugural period, the V. M. I. cadets, attending that ceremony, were presented on the previous day with a flag, the gift of V. M. I. alumni residing in New York, and an exact reproduction of the one borne by the New Market battalion, a banner of white silk, with a portrait of Washington on one side and the Virginia coat of arms on the other. General Bell was selected to make the presentation, which he accompanied with the most complimentary remarks. The Baltimore Sun, in commenting on this episode, says: "The banner carried in the New Market fight was carried by as gallant a band of boys as ever did honor to any country. They acquitted themselves like men, and the bravest of the brave. It was an occasion unique in the history of this country, and an exhibition of heroism which should be held in remembrance."

The Federal General Siegel, established himself at Winchester in April, 1864, with a force of about 8,000 infantry 2,500 cavalry, and three or four field batteries, and was making ready for a forward move. General Iboden, of the Confederate Cavalry, advanced to meet him with a force of 1,492 men and a hundred scouts. In a few days, General Breckenridge came from southwest Virginia to join Imboden, with 2,500 veteran troops. These generals, however, were so largely outnumbered by Siegel that Breckenridge felt himself obliged to call out the V. M. I. cadets, though he hoped he might only have to use them as a reserve, and when he was finally compelled to call them into battle, it is said he exclaimed, "May God forgive me!" immediately after giving the order.



SELWYN FARM

Pure Bred Berkshires and Jerseys

Headed by the \$1,100.00 Son of Premier Longfellow 68600.

LEE'S PREMIER 3rd, 112763.



THE SHORTEST NOSED AND THE BEST HEADED BOAR IN AMERICA.

We are now booking orders for his pigs of both sexes, which are marked just like him; or will sell you magnificently bred sows safe with pig to him. Our herd contains sons and daughters of the peerless Longfellow, 68600, Berryton Duke 72946, (litter mate to Masterpiece 77000); Premier Longfellow's Rival 101678; Duke of Oakdale 93955.

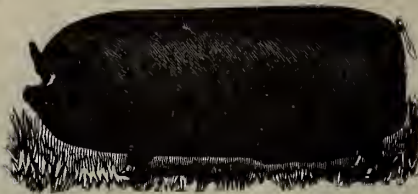
Sows bred to Lee's Premier 3d 112763 and pigs of both sexes by Duke of Oakdale 93955; Berryton Duke 72946 and Premier Longfellow's Rival 101678.

One Registered Jersey Bull Calf 3 months and one 9 months old for sale. Write for descriptive booklet and prices.

EDGAR B. MOORE, Proprietor, Charlotte, N. C.

REDUCED PRICES ON

BRED BERKSHIRE GILTS



for next 30 days only.

The panic drove hundreds of breeders out of business. The next twelve months will see them tumbling over one another to get back—as the demand and prices advance. I staid in the boat, kept up my herd and advertisements, hence am well equipped for orders. My Berkshires are as fine as the world can produce. Price in easy reach of everyone. Scores of pigs ready for shipment.

THOS. S. WHITE,

Fassifera Stock Farm.

LEXINGTON, VA.

IF YOU WANT THE BEST HOG

Buy from those who give their sole attention to the production of the greatest Berkshire Type.

—WE DO—

Our herd comprises the most splendid lines of breeding and individuals that money can buy or experience develop in American and English Bred Berkshires.

"LORD PREMIER OF THE BLUE RIDGE," 103553, the greatest living boar, heads our herd. If you are interested write.

THE BLUE RIDGE BERKSHIRE FARMS, ASHEVILLE, N. C.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.



COOPER & SONS SALE MAY 31, 1909 AT COOPERSBURG, PA.

A PLEASED BUYER IS THE BEST ADVERTISEMENT.

The imported Jersey Cattle sold at our May, 1908, auction sale have given universal satisfaction. Our most sanguine expectations have been more than realized. How could it be otherwise? Individually, they were strictly **FIRST CLASS**.

Best of all, they were bred on both dam and sires' side from animals that have made the Island Cattle so famous—the blood that wins at the churn and in the show ring.

For a number of years the blood of Golden Ferns Lad has dominated the show and sales rings. The climax was reached last year, when every winning of any consequence, at all of the principal fairs, in America, England and the Island was made by a son or a daughter or a near descendent of Golden Fern's Lad. The record price at auction (\$11,500) was made for a grandson of Golden Fern's Lad, and an eight months old Bull Calf by him brought \$10,200.

At the National Dairy Show, Chicago, 1907, the Grand Champion and Junior Champion females were daughters of Golden Fern's Lad, the Grand Champion Bull was a grandson and the Junior Champion Bull was sired by a grandson and out of a granddaughter of Golden Fern's Lad. The four prizes for bull and get (the most important of all prizes) all went to Golden Fern's Lad and his close descendents.

If you intend to begin breeding Jerseys, or if you are now breeding, don't you think the above record is worthy of your attention? and "look before you leap." They are winners at the churn and in the show ring—you are always certain to be called up front by the judge for the blue ribbon.

Catalogues ready for distribution May 10th. When applying, mention Southern Planter, as, owing to the great cost of publishing same, they will only be sent on application. Address

T. S. COOPER & SONS, "LINDEN" GROVE COOPERSBURG, PA.

P. S.—Would respectfully request parties who are in want of an extra fine Bull Calf or a few fine Hefler Calves that they send for a catalogue, which will give them full particulars, and if they are not able to attend the sale in person that they send in their bids and they will receive the same attention as if the buyer was a bidder himself. It is with pride that we refer to parties that have entrusted such orders to us. This will be a rare chance to get calves out of the very best cows the Island can furnish, and sired by prize-winning bulls, which will not cost you more than others that have no breeding.—T. S. C. & Sons.

(Decoration Day falling on Sunday, the sale will be held on Monday, May 31st)



Blacklegoids

FOR PROTECTING CATTLE AGAINST BLACKLEG.

SIMPLE—SAFE—SURE.

NO DOSE TO MEASURE. NO LIQUID TO SPILL. NO STRING TO ROT.

KRESO DIP FOR ALL LIVE STOCK

Kills Lice, Mites and Fleas. Cures Mange, Scab, Ringworm. Disinfects, Cleanses, Purifies.

ANTHRAXOIDS

A SAFE ANTHRAX VACCINE

FOR PROTECTING HORSES, MULES, CATTLE, SHEEP, GOATS AND SWINE AGAINST ANTHRAX.

WRITE FOR FREE BOOKLETS UPON THESE PRODUCTS.

BRANCHES:
New York, Kansas City, Baltimore,
New Orleans, Boston, Chicago,
St. Louis and
Minneapolis, U. S. A.

PARKE, DAVIS & CO.

DEPARTMENT OF ANIMAL INDUSTRY.

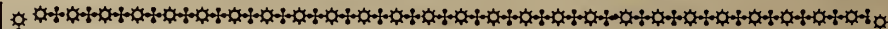
DETROIT, MICHIGAN, U. S. A.

BRANCHES:
London, Eng. Walkerville, Ont.
Montreal, Que. Sydney, N. S. W.
St. Petersburg, Russia.
Bombay, India.

The cadets started on their march on the 11th of May. How gaily those young fellows set out!

"In the happy morning of life and of May," one of the survivors, in describing their start, says, "it was the most joyous moment of his life." The boys, in their gayety and exuberant spirits, shouted and sang and whistled as they swung along, all of them joining now and then in the chorus of some favorite air. Arrived at Staunton, they had yet forty miles to make before reaching New Market, which was a little village of about one thousand souls, nestling between the mountains and the river in Shenandoah county. The trip was a four days' march, some of it through rain and mud. The battle day dawned bright and beautiful, thought quite a severe thunder storm came on while the fight was raging. The cadets were assigned a central position so as to be as little exposed as possible. The handsome and gallant Kentuckian in command rode up to the cadet corps, just before the engagement, and looking tenderly on the youths, said: "Young gentlemen, I hope I shall not have to call upon you to-day, but, if I should be obliged to do so, I know that you will do your duty." How nobly they fulfilled Breckinridge's confidence in them is a fact emblazoned upon the pages of history.

The battle was progressing successfully for the Confederates, though stubbornly contested by the Union forces when a terrible fire met Breckinridge from one of Sigel's batteries which was on elevated ground, doing much damage to the Confederate infantry. It was then, about 2 P. M., that the cadets were called into action, though they had already suffered several casualties from random shells. The boys, with agility and enthusiasm of their years, outran the veterans who were alongside of them, crossing a deep and rocky gully about three hundred yards from the battery, under the concentrated fire of its six guns, plunging through thorns and briars and overfallen logs and stumps of trees. Then they waited several minutes for the Sixty-Second Virginia Regiment, keeping their formation with wonderful coolness, under the deadly fire of the battery. When the order was given to charge, the encounter was soon over, though the gunners stood gallantly at their guns, until overpowered. A cadet mounted a caisson and waved from it in triumph the Virginia State flag, the colors of the Institute, thereby arousing a yell of triumph from the Confederates. Then there was a general advance along the whole line, and the battle was won. The cadets, out of two hundred and twenty-five, had eight killed and forty-six wounded. General Shipp, of the V. M. I. was struck down at a critical point in the charge, and the command then devolved on one of the Assistant Pro-



GROVE FARM

PRIZE-WINNING HERD OF

GUERNSEYS

Will be Sold at Public Auction

MAY 14th, 1909

AT 1 O'CLOCK P. M.

A number are by the Great Bull, Strong Anchor, (adv. Reg. 85.) Including the Champion Cow of 1908, Clare of Poplar Grove 3rd and Milford Lassie 2nd Anchor, whose get won Breeder's young herd at New York State Fair and Richmond, Va. 1908.

Tuberculin tested April 5th.

Farm located at Brooklandville, Md. on Penna. R. R. one half hour from Union Station, Baltimore.

For catalogue address.

J. McK. Merryman,

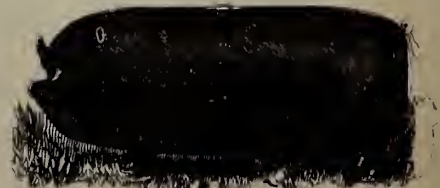
R. F. D. Lutherville Md.

or John Folan 923 - 60th St., - Brooklyn, N. Y.



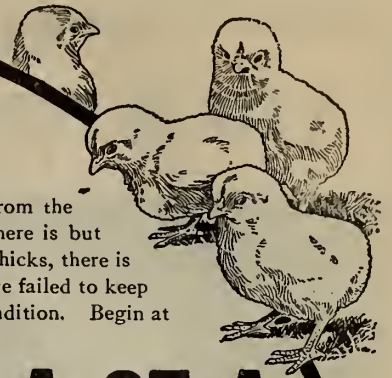
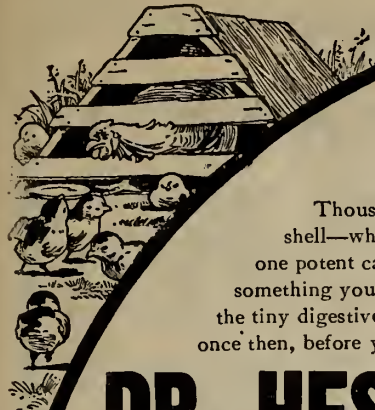
Moore's Brook Berkshire Herd

We have the best lot of Pigs this Spring we have ever had. This breeding cannot be excelled and they are equal to their breeding. Pigs ready to ship after May 5th. The Fall boars are fine ones. Bred sows for sale after May 14th. Some of these will be bred to a fine son of Lord Premier 50,001.



MOORE'S BROOK SANITARIUM CO., Charlottesville, Va.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.



Are You Losing Chicks

Thousands of promising little chicks die, only a few days from the shell—why? Outside of accidents, depredations of rats, etc., there is but one potent cause of chicken mortality—*neglect*. If you are losing chicks, there is something you are not doing that you should do. Very likely you have failed to keep the tiny digestive organs of these little creatures in a healthy, active condition. Begin at once then, before you lose another, to give a very little of

DR. HESS Poultry PAN-A-CE-A

once a day.

Dr. Hess Poultry Pan-a-ce-a is the prescription of Dr. Hess (M. D., D. V. S.) and in it are just the elements your chickens need to bring about healthy growth. It is "**The Dr. Hess Idea**" that even though a fowl be confined, you can, by *aiding digestion*, provide every needed element. Dr. Hess Poultry Pan-a-ce-a contains bitter tonics for digestion, iron for the blood and cleansing nitrates. It will make vigorous breeding stock, and it will save the little chicks after hatching and hurry them on to the point where they're profitable.

Nothing fills the egg basket like Poultry Pan-a-ce-a. It also cures gapes, cholera, roup, etc.

"**The Dr. Hess Idea**," put in practice, means unending success with hens. One penny's worth of Dr. Hess Poultry Pan-a-ce-a is sufficient for 30 hens one day. **Sold on a written guarantee.**

1 1-2 lbs 25c; mail or express 40c
5 lbs 60c; 12 lbs \$1.25; 25 lb pail \$2.50

Except in Canada and Extreme West and South.

DR. HESS & CLARK,
Ashland, Ohio.

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS STOCK FOOD

is a tonic, formulated expressly to correct a weakened animal digestion. That it does this is the testimony of successful feeders everywhere. It is "**The Dr. Hess Idea**," and contains elements which act upon animal organs, causing the maximum amount of food to be assimilated. It makes a dairy cow give more milk, a fattening steer round out trim and plump in the least time; makes hogs fat and puts horses in prime condition. The ingredients in Dr. Hess Stock Food are recommended by prominent medical men to act upon digestion, build good blood and eliminate all dead, poisonous matter. **Sold on a written guarantee.**

100 lbs. \$5.00; 25 lb. pail \$1.60. Except in Canada and extreme West and South. Smaller quantities at a slight advance.

Send 2 cents for Dr. Hess Stock Book, free.

INSTANT LOUSE KILLER KILLS LICE

fessors, Capt. Henry A. Wise, nephew and namesake of Governor Wise.

In June, 1903, a most beautiful and appropriate monument to the New Market Battalion was unveiled at Lexington, Virginia, the cornerstone having been laid on the 15th of May. The sculptor was Sir Moses Ezekiel, of Richmond, Virginia, himself one of the heroes of New Market. It is a colossal bronze figure of a majestic looking woman, with her head bent in an attitude of grief, and is entitled, "Virginia mourning her dead." Ezekiel's execution and donation of this monument as a memorial to the dead and living of the New Market Battalion, was the most graceful and appropriate act of his artistic career. In a letter to the Committee in charge of the memorial, Ezekiel thus describes the statue and indicates what it is intended to express:

"As orderly Sergeant of Company C Virginia Military Institute, I feel it almost a duty to write and say that if you intend putting up a monument to my fallen comrades in the battle, I hope to be the means of rendering my tribute to their memory in the

BILTMORE

JERSEY BULL CALVES AND HEIFERS

We have just made a fresh selection of extra good young things from our herd for sale, and we offer at most

REASONABLE PRICES

Heifers of the highest class of all ages from HEIFER CALVES TO BRED HEIFERS and a few well bred

BULL CALVES OUT OF TESTED DAMS.

POULTRY.

Our 1909 illustrated poultry list is now ready. Write for it.

BILTMORE FARMS.

R. F. D. No. 2,

BILTMORE, N. C.

A Few BERKSHIRES FOR SALE.

T. O. SANDY, BURKEVILLE, VA.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

ROSE DALE HERD ABERDEEN-ANGUS CATTLE



We offer to the farmers and breeders of the East strictly choice Young Registered Bulls from weanlings to serviceable age. They are of the straight, broad-backed, low-down, compact, blocky type. Many of them show ring animals. They represent the blood of Master II. of Meadow Brook; Gay Lord, Jr.; Heather Lad II., Zaire V., Ermine Bearer, Blackbird of Corskie IV., Black Abbott, Abbottsford, Coquette X., Etc.

They are well grown out, in thrifty condition, but not pampered. Come and see them or write us your wants. Prices right. We can please you. Angus Cattle are our specialty. We raise no other stock, but give them our undivided personal attention.

To avoid inbreeding we offer an exceptionally good herd bull. Write for particulars. Address

ROSEDALE STOCK FARMS, JEFFERSONTON, VA.

work of my hands, in my own art. My statue of "Virginia mourning her dead" I have kept in plaster all these years.

The mail clad female figure is seated mourning upon a piece of breast work, and her foot rests upon a broken cannon, overgrown with ivy, and she holds a reverse lance in her hand. This statue in bronze, if placed on the parade grounds, I would consider the most appropriate ideal representation of what it is proposed to do. The hackneyed shafts and bronze soldiers that have so often been erected have nothing to do with such an object as ours, and mean nothing."

The statue weighs 1,750 pounds, and is seven feet in height. It is a master piece of art, each detail being perfectly executed, and it is not surpassed by any work of its kind in this country. The casting (which was done near Berlin) and the freight fees amounted to three thousand dollars. The base is oval in shape, four feet five inches in height, and three feet thick. It is of plain, native granite, solid, with four massive bronze tablets on the sides. One of these tablets contains "the roll of honor," the names of those killed and wounded in the battle of New Market, and the other tablets contain a complete roster of the Cadet Battalion on that memorable day.

The monument was unveiled on the 23d of June, 1903, and nearly all the survivors of the New Market Battalion were present. How strange it seemed to see them old and bent and grey haired when we are wont to think of that glorious band as being in the first flower of youth. To the deep regret of his colleagues, Sir Moses Ezekiel was unable to be present, but he sent them a cablegram that morning from Rome. It was in Latin, but, translated, read thus: "I am present in spirit and still holding the portals of the renowned gateway

We have demonstrated the fact that

ABEERDEEN ANGUS CATTLE

will sell in the South, if the cattle are first class in breeding and individual quality and the price within reach of the farmer's pocket-book. We have tried to handle only the best cattle, and are again sold entirely out. Will have nothing to spare until the spring crop of calves are ready next fall.

A. L. FRENCH,

SUNNY HOME FARM,

BYRDVILLE, VA.

Acca Stock Farm

Trotting Horses and Jersey Cattle of the richest breeding and most fashionable strains of blood. Our herd of Jerseys has been selected with great care and includes choice representatives of families, both noted as producers and show ring winners.

STALLIONS IN SERVICE.

Akar, 42021, chestnut horse, 4, by Aquillin, 2:19 $\frac{1}{4}$, son of Bingen, 2:06 $\frac{1}{4}$; dam Pavetta, by Pistachio, 2:21 $\frac{1}{4}$. Akar paced a trial in 2:15 $\frac{1}{4}$ with quarters better than 30 seconds last season at 3 years old.

Berro, 41821, trotter, bay horse, 4, by Bingara, son of Bingen, 2:06 $\frac{1}{4}$, dam Keshena, by Kremlin, 2:07 $\frac{1}{4}$.

Fee for either horse \$25 season, with return privilege. Address

GRIFFITH & SAUNDERS, Acca Stock Farm, Richmond, Va.

EXCELLENT

SHORTHORN HEIFERS AND BULLS.

By the Scotch topped Bull, Royal Lad (advertised by the old reliable breeders, P. S. Lewis & Son, as the best bull ever bred on their farm) by the International winner, Frantic Lad, son of The Lad for Me, champion of America in 1900. Also a few fresh Shorthorn Cows.

Pure Yearling SOUTHDOWN RAMS by Senator, a prize winner in Canada as a lamb and a yearling. He was bred by Hon. George Drummond, the foremost Southdown breeder in America.

R. J. HANCOCK & SON. "Elleralle." Charlottesville, Va.



ARTIFICIAL MARE IMPREGNATORS

Impregnators for getting in foal from 1 to 6 mares from one service of a stallion or jack, \$3.50 to \$6.00. The popular Safety Impregnating Outfit, especially adapted for impregnating so-called barren and irregular breeding mares, \$7.50. Breeders Bags, Serving Hobbles, Stallion Bridles, Body Rollers, Shields, Supports, Emasculators, Ecreseurs, Service Books, etc. First quality goods only. All prepaid and guaranteed. Write for FREE Stallion Goods Catalogue.

CRITTENDEN & CO., DEPT. 54 CLEVELAND, OHIO.

Stallion Goods

MORVEN PARK ESTATE.

The Property of WESTMORELAND DAVIS, Esq.

Large Yorkshire Swine.

These pigs are hardy and prolific. The two boars that took the first prize in their classes at the Virginia State Fair had been exposed, without cover or shed for a year in the open. They had, as have all our pigs, well developed carcasses, covered with heavy growth of hair that insures against scurf or skin troubles in hot climate. These pigs mature early are good mothers, and are very prolific. They are the bacon pig of England and of the West.

WE HAVE THE FINEST STRAIN OF IMPORTED BLOOD FOR SALE.

Registered Guernsey Cattle.

Dairymen shipping to the city markets will find a Guernsey bull most valuable to cross on their herds, thus increasing the content of butter fat in their milk or cream. Especially is this cross desirable when shipping to cities where dealers pay upon the basis of butter fat.

At the Pan-American Exposition, the only time the Guernsey met other breeds in competition, the Guernsey led all breeds for the most economical production of high-class butter.

We Have Brilliantly Bred Bulls For Sale.

Dorset Horn Sheep.

We have the largest flock of Imported Dorsets in America. They are of one type and born thrifty and prolific.

WE ARE BOOKING ORDERS FOR EARLY DELIVERY OF LAMBS.

For further particulars, address,

LIVE STOCK DEPARTMENT, MORVEN PARK ESTATE,

LEESBURG, LOUDOUN CO., VA

Hygeia Herd Pure-Bred Holstein-Friesians

It is no more expensive to maintain a good bull at the head of your herd than a poor one, and the former is certainly worth many times his cost. Therefore write for pedigree and price on one of the richly bred bulls which this herd now offers for sale.

Address: W. F. Carter, Jr., Agent. Crozet, Albemarle County, Virginia. W. Fitzhugh Carter, M. D., Owner.

The breed holds the milk and butter records of the world—the herd embraces some of its best families.

in fond and faithful remembrance. I send greetings. Moses Ezekiel."

But sculpture was not the only fine art dedicated on that day to the heroes of New Market. The Hon. A. C. Gordon, of Staunton, delivered a commemorative ode of his own composition, which is so beautiful that I will transcribe a few verses of it:

"New Market. A Threnody."
How shall the eternal fame of them be told
Who dying in the heyday of life's morn,
Thrust from their lips the chalice of bright gold,
Filled to the brim with joy, and went forlorn
Into the abysmal darkness of that bourn
Whence they who thither go may nevermore return.

No blight had touched the garlands that they wore,
Dewy and fresh with innocence and truth.
No dead illusions nor spent glammers bore
With heaviness upon them. Their gay youth
Caught but the bubbles on the beakers' brim,
Nor e'er beheld life's lies with eyes grown old and dim.

"Send the cadets in, and may God forgive,"
Who spoke the word had welcomed thither death.
Truth dies not, and liberty shall live,
E'en though youth wither in the cannon's breath."
And at the order, debonair and gay,
They moved into the front of an immortal day.

"Battalion, forward!" rang the sharp command;
"Guide, centre!" and the banner was unfurled.
Then, as if on parade, the little band
Dressed to the flag. A sad and sombre world
Thrills with the memory of how they went
Into that raging storm of fire and carnage bent."

BIG MILKING, HIGH-GRADE OR REGISTERED

HOLSTEIN-FRIESIAN COWS

Are what the South needs. We furnish the kind that fill the pail every time they are milked. They are "mortgage lifters." Don't keep unprofitable scrubs. Send for free circular, "Cow Boarders."



We furnish cows that will give from 7 to 10 gals. per day and 5,000 to 6,000 qts. a year.

We recently sold Sweet Briar Institute, Sweet Briar, Va., a car of high-grade Holstein Cows. Go and look at them. They are fairly representative of what we offer.

We are responsible and furnish the highest references.

Two "Mortgage Lifters"—Milk Records of 12,000 lbs. Each a Year.

All mail orders will receive the same attention as if personally selected. Write to-day stating wants.

THE SYRACUSE BREEDERS' ASSOCIATION, Utica, N. Y.

THE HOLLINS HERD

OF

HIGH-CLASS HOLSTEIN-FRIESIANS

A WORKING HERD WORKING EVERY DAY IN THE YEAR.

The entire herd of 22 head (14 pure-breds and 8 grades) of which 14 are heifers with 1st or second calves, produced from October 1st, 1907, to October 1st, 1908

195,941 LBS. OF MILK.
8,906 LBS. PER HEAD.

Ten pure-breds, including two heifers freshening late in the fall with 1st calves and in milk only 8½ months, produced from October 1st, 1907 to October 1st, 1908.

104,255 LBS. OF MILK.
10,425 LBS. PER HEAD.

Registered Bull Calves for sale.

JOS. A. TURNER, General Manager.

HOLLINS, VA.

JERSEY CATTLE of EXCELLENT BREEDING

Cows fresh to pail. Bulls ready for service. Young stock both male and female. All high-bred animals. Prices reasonable.

BERKSHIRES.

Pigs \$5 each. Boars ready for service. Address

EVERGREEN FARMS,

W. B. Gates, Prop.,

RICE DEPOT, VA.

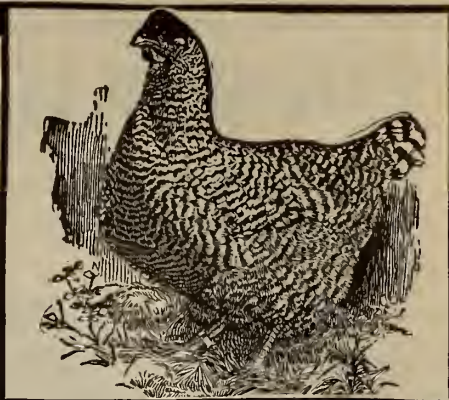
TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

Chicken Cholera

is your most dangerous foe, Mr. Poultry Breeder. If prompt action is not taken, it may result in the loss of all your poultry. However, by promptly using the proper treatment, you can not only prevent the spread of the disease through your flock, but you can also save many of the chickens already affected. If you will examine a chicken that has died of Cholera, you will find the liver enormously enlarged and discolored. The intestines also are inflamed and disordered. But if, when the cholera first appears, you will give your fowls liberal doses of *Black-Draught Stock & Poultry Medicine*, the liver will probably remain normal and the treatment will also cleanse the intestines of the cholera germs. You should also disinfect thoroughly the houses, ground, feed and everything within your poultry yards.

When you have successfully combated the disease, you should continue the use of *Black-Draught Stock & Poultry Medicine* in smaller doses, as a tonic to put your fowl in the best condition.

Many well-known breeders use and recommend this medicine. Try it.



BLACK-DRAUGHT STOCK & POULTRY MEDICINE

Sold by All Reliable Druggists and Dealers.

P 6

A worn and weary world in sorrow weeps

For high hopes vanished at life's sunny morn;

Yet Truth, with eyes that never falter, keeps

Her gaze on freedom's face that smiles in scorn

Of death for them who wear the laurelled crown,

The early dead who die with an achieved renown."

"Creeds fail, faiths perish, empires rise and fall,

And as the shining sun goes on his way

Oblivion covers with a dusty pall

The life of man, predestined to decay,

Yet is there one thing that shall never die—

The memory of the Dead for Truth and Liberty."

It is not always that good things can be procured for nothing, but we have before us a very attractive illustrated booklet that we believe should be in the hands of every grower. It is concise in statement, with much useful information. You can obtain a copy by addressing a postal to Leggett & Brother, 301 Pearl street, New York, asking for their Spray Calendar.

A MODERN SAPPHIRA.

Chief Clerk: "Here comes the lady who wrote those articles on 'How I Live Pegally on Six Dollars a Week.'"

Satan: "Put her over there with the other liars." —Lippincott's.

POLLED HEREFORDS AT AUCTION.

TUESDAY, MAY 18th, at 11 A. M., two miles from Timonium Fair Grounds, Baltimore County, Md.

- 3 Double Standard Polled Hereford Bull Calves, 4, 6 and 7 month old.
 - 2 Single Standard Polled Hereford bulls, 2 and 6 years old.
 - 2 Registered Horned Hereford Cows, 2 and 3 years old, bred to Double Standard Polled Bull.
 - 1 Double Standard Polled Hereford Cow, 3 years old.
 - 1 Standard Bred Stallion, "Red Sid" by Sidney out of Florence Wilkes.
 - 3 Registered Berkshire Sows, bred.
 - 2 Large English Yorkshire Sows, bred.
- 10:30 train from Baltimore will be met at Sherwood Station, N. C. Ry., with conveyance. Mail bids will receive attention.

W. B. DUKE, RIDER, MD.

DUROC SWINE SHORTHORN AND POLLED DURHAM CATTLE.

The Duroc is the most prolific hog on earth. The large fairs of the West prove that they are the most popular hog of that section. The demand for them in the South shows conclusively that they are the coming hog of the South. We have the largest herd in the East and one of the most fashionably bred herd in America. Sows in pig, herd boars and shotes of both sexes, not related, for sale. Send for catalog and "Duroc Facts."

Shorthorn and Polled Durham cows, heifers and bulls for sale. See ad. elsewhere in this issue.

LESLIE D. KLINE, Vacluse, Va.

BERKSHIRES and JERSEYS.

A few nice cows and a Registered Bull, of excellent breeding for sale. Berkshire Pigs, 3 months old, and a few sows bred, all in nice condition. Barred Rock and S. C. B. Leghorn Eggs for sale. I will please you.

RIVER VIEW FARM,

RICE DEPOT, VA.

When corresponding with our advertisers always mention Southern Planter.

1909 Allandale Farm 1909

ROYAL SWELL, 34892, Bay Horse, 15.2½ hands high, by Bow Bells, 2:19¼, dam Rachel, 2:08¼, by Baron Wilkes, 2:18.

A Trotting Stallion that lives up to his breeding in conformation, style and gait—a show horse all over. His tabulated pedigree, which follows, shows him to be one of the best bred trotting stallions in the world:

ROYAL SWELL, 34892.

MAHOGANY BAY
with black points; near hind heel white.
FOALED FEB'Y 5, 1901.
Bred by Marcus Daly, Bitter Root Farm, Hamilton, Mont.
A perfect individual with great beauty, perfect disposition, extreme speed, a pure gaited trotter and as richly and fashionably bred as any horse ever foaled.

Bow Bells, 13073.....
Record 2:19¼.
Sire of
Beasant2:06½
Matin Bells2:06½
Billy Andrews2:06½
Bellewood A2:07½
Prince Selma2:10¾
Bel Esprit2:12½
Janie T. (2 yrs.)...2:14
Champion 2-yr filly;
Futurity winner.)
Ringing Bells2:13½
Wilkes Belle2:14¼
including
Boreal, 3 yrs.....2:15¼
Sire of
Boralma, 5 yrs....2:07
(Futurity winner 1899;
Transylvania winner in 1900.)
Pan Michael2:03
Own brother to
Chimes2:30¾
Sire of
The Abbott2:03¼
(World's Champion in 1900.)
Electric Bell, sire of
Captor2:09¼
St. Bel, 2:24½, sire of
Lynne Bel2:10½
Rachel
Record 4 years., 2:08¼
Winner of 9 races. Twice 2d; once 3d; twice 4th, and never unplaced.
Great Spirit2:11¾
Dam of
The Envoy (Peace Commissioner) ...2:25¼
Sire of
Bedelia B.2:27¾
Town Founder2:18
Sire of
Prodigal Queen2:30

Electioneer, 125
Sire of
Arion2:07¾
Sunol2:08¾
Palo Alto2:08¾
And 163 others in 2:30
Sires of the dams of
Klatawah2:05½
Dolly Dillon2:06¾
Lisonjero2:08¼
Wild Bell2:08¼
Cavallero2:09½
Crafty2:09¾
Beautiful Bells
Record 2:29½.
Champion trotting brood mare
Dam of
Belleflower2:12¾
Belsire2:18
Bell Boy, 3 yrs....2:19¼
Palo Alto Belle...2:22½
Hinda Rose, 3 yrs. 2:19½
Palo Alto Belle...2:21½
Adbell, 1 yr.2:23
Monbells, 4 yrs...2:23½
St. Bel, 4 yrs....2:24½
Bell Bird, 1 yr...2:26¼
Adbell2:29½
Baron Wilkes, 4758.....
Record 2:18. Sire of
Bumps2:03¼
Rubinstein2:05
Rachel2:08¼
Oakland Baron ...2:09¼
Seven others in...2:10
And the dams of
Lady Gail Hamilton 2:06¼
Rollins2:08
India Silk2:10¾
Circle2:11¼
Great Spirit2:11¾
Willie Wilkes, 2:28.....
Dam of
Rachel, 4 yrs....2:08¾
Great Heart2:21½
Bowery Boy.....2:15¼
Bowery Bell2:18¼
Deluge2:19¼
Aspirator2:24½
Dam of
Great Heart, 2:21½, sire of
Auto2:04¼
Wilkes Heart2:06¼
Octoo2:07½
Thelma2:09¼
Namoo2:09¼
Xava2:10¼
And 23 others.
Woodsprite, sire of
Hal Frey2:09¼
Miss Liler2:18¼
And 4 others.
Crystal, dam of
Cut Glass2:10¼
King Crystal2:14¼
Spanish Boy2:16¾
Crystalline, 2 yrs.
(1 in 2:30)2:19¼
Spun Glass2:24½
Crystal's Last2:27½
Crystalloid2:28½

Hambletonian 10
"The great fountain head of trotting speed." Sire of Dexter 2:17¼, (World's Champion).

Green Mountain Maid,
"The great mother of trotters."
Dam of Elaine 2:20; Prospero 2:20; Ellsta 2:20¾; Dame Trot 2:22; Lancelot 2:23, and 4 other 2:30 trotters.

The Moore, 870; 2:37
Sire of
Sultan2:24
And others.

Minnehaha
Dam of
Baron Rose2:20¼
Alcazar2:20½
Mascot2:25¾
Pawnee2:26½
San Gabriel2:29¾
Beautiful Bells2:29¾

George Wilkes, 519; 2:22
Cham. Stallion, 1868-1871.
Sire of 83 2:30 performers, and dams of 183 2:30 performers.

Belle Patchen, 2:30¾.
Dam of
Baron Wilkes2:18

George Wilkes, 519, 2:22,
Sire of
Harry Wilkes2:13¼
And 82 others in 2:30 list.
Sire of dams 183 in 2:30.
Sire of 102 2:30 sires.
Sire of dams 34 in 2:15.
Sire of dams 12 in 2:10.
Sire of 70 2:15 sires.
Sire of 40 2:10 sires.
Sire of 5 2:05 sires.

Salley Southworth,
Dam of
Chatterton (sire of 6 2:30 trotters) ...2:18
Willie Wilkes2:28
Dam of
Rachel, 4 yrs.2:08¼
Great Heart (a 2:10 sire)2:12½
Bowery Boy2:15
Bowery Belle2:18¼
Deluge2:19¾
Aspirator2:24
Woodsprite, sire of
6 in2:30
Crystal, dam of 7 in 2:30

ROYAL SWELL'S get have fine size, are of show horse type and full of trot. He has some grand foals in the East that will soon bring him into prominence as a sire, and his daughters should make as good brood mares as money will buy.

FEE—\$25 the season, with usual return privilege in case of failure. Mares from a distance can be provided for on exceedingly liberal terms for keep. Address,

ALLANDALE FARM, Fredericksburg, Va.

1909 Allandale Farm 1909

Bow Axworthy 33939, record 2.22¼; trotter, chestnut stallion, 15.2 hands, by Axworthy, 2.15½, dam, the famous brood mare, Mystic, by Nutwood, 600. A grand individual, bred in the purple and a sire of merit.

AXWORTHY 24845
Record, 3, 2:15½
sire of
Hamburg Belle...2:04¾
Gen. Watts (3)...2:06¾
Tom Axworthy (4) 2:07
Guy Axworthy (4) 2:08¾
Alta Axworthy (3) 2:10½
Nelda Worthy...2:12½
Sid Axworthy...2:12½
Jack Axworthy (2) 2:15¼
King Axworthy...2:15½
Flying Axworthy 2:15¼
Bucklock, p (3)...2:16
Lady Worthy...2:18¼
Young Worthy...2:19¼
Octavia Worthy, p 2:19¼
Al Axworthy...2:19½
Effe Worthy (3) 2:20
Miss Lou...2:20¼
Con Axworthy 4...2:20¼
More Worthy, p 2:20¾
Margaret J.2:21
Dorothy Axworthy
(2)2:21¾
Con Axworthy2:21½
Nell Worthy...2:22
Bow Axworthy .2:22¼
Voni Axworthy (3) 2:22¼
38 others in 2:30
and dam of
Della Bell.....2:27¼

MYSTIC
dam of
Fred Kohl2:07¾
sire of
Prince Kohl....2:24¼
Mystery2:17½
Young Axworthy 2:19¼
Bow Axworthy...2:22¼
Orowood, sire of
Saint Wood...2:21½
Nyanza Wood...2:27¼

AXTELL 5183.....
Record, 3, 2:12
sire of
Home Circle, p...2:07
Ozanam2:07
Elloree2:08½
Angle2:08½
Ax, p.2:09¼
Praytell, 4.2:09¼
Mainland2:09¼
Axdelight2:11½
Tessie S.....2:12¼
117 others. Dams of
Mainsheet2:05
Margaret O.....2:05¼
37 others in 2:30.

MARGUERITE
dam of
Marguerite A.....2:12½
Axtellion2:15¼
(sire of 4 in 2:30)
Axworthy, 3.....2:15½
(sire of 63 in 2:30)
King Darlington. 2:16
sire of
Kingmond2:09
Dash2:16¾
Mary A.2:27¼
Col. Axtell2:30
and granddam of
Margaret O.....2:05¼
Marie Onward...2:27½
Alcies2:27½
Mighty Marguerite 2:29¼

NUTWOOD 600.....
Record 2:18¾. Sire of
Manager, p.2:06¾
Lockheart2:08¼
172 others. Dams of
Alanwood, p.....2:04¼
Custer, p.....2:05¼
Eyelet, p.....2:06¼
Bellewood A. p...2:07½
Arion, 4.....2:07¾
Fred Kohl2:07¾
Consuella S.2:07¾
Sunland Belle, p. 2:08¼
322 other in 2:30.

EMMA ARTEBURN.....
dam of
St. Arnaud.....2:29¼
(sire of 7 in 2:30.)
Thornwood Gem, sire of
1 and granddam of
Fred Kohl.....2:07¾
6 others in 2:30.

WILLIAM L. 4244.....
sire of
Axtell, 3.....2:12
William Bell, p...2:13¼
10 others. Dams of
Miss Willamont, p 2:07½
Lundeen, p.....2:12
31 othehrs in 2:30

LOU
dam of
Axtell, 3.....2:12
Drexell, sire of 3
Geronomo, sire of 3
and sister to
Young Bird, dam of 4

KENTUCKY PRINCE 2470
sire of
Guy2:09¾
40 others. Dams of
Tom Keene, p....2:04¼
Swift2:07
121 others in 2:30.

YOUNG DAISY.....
dam of
Prince Lavalard...2:11¾
Greylight2:16½
Duke of Well'gton 2:20
and granddam of
Axdelight2:11¾
9 others in 2:30.

BELMONT 64.....
sire of
Earlmont, p.....2:09¾
58 others. Dams of
Tom Nolan, p....2:08¾
Baron Belle2:09
Nancy Turner, p. 2:11¼
139 others in 2:30

MISS RUSSELL
dam of
Maud S.2:08¾
Sclavonic, p.....2:09¾
Rustique2:18½
Pistachio, p. (sire) 2:21¾
3 others in 2:30
and granddam of 12.

MAMBRINO PATCHEN 58
sire of
London2:20½
24 others. Dams of
Ralph Wilkes....2:06¾
Jupe2:07½
160 others in 2:30.

JENNY JOHNSON
granddam of
St. Arnaud.....2:29¼
sire of
Reina2:12¼
Judge Keeler .2:14¼
5 others in 2:30.

GEORGE WILKES 519
Record 2:22. Sire of Har-
ry Wilkes 2:13½, 82
others. Dams of Man-
ager, p. 2:06¾.

LADY BUNKER
dam of Guy Wilkes
2:15¼, El Mahdi 2:25½
4 sons are 2:30 sires
and granddam of 2, etc

MAMBRINO BOY 844
Record 2:26½. Sire of
Rockey Boy 2:13½,
14 others. Dams of
Alerton 2:09¼, etc.

BIRD MITCHELL
dam of Lou, dam as
noted; Young Bird,
dam of 4, etc.

CLARK CHIEF 89
sire or dams of Martha
Wilkes 2:08. W. H. G.,
p. 2:09¾, etc.

KENTUCKY QUEEN
dam of Kentucky Prince,
sire as noted

STRIDEWAY 294
Record 2:31. Sire of
Pratt 2:28 and dams of
4 standard performers.

OLD DAISY
granddam of 3 standard
performers.

ABDALLAH 15
sire of Goldsmith Maid,
2:14, 4 others and
dams of Favonia 2:15,
etc.

BELLE, BY MAMB. CHIEF
11
dam of of Hambletonian
2:26½, 4 sons are 2:30
sires and graddam of
7, etc.

PILOT JR. 12
sire of 8 and dams of Jay
Eye See, p. 2:06¼, 39
others in 2:30.

SALLY RUSSELL
granddam of 7 in 2:30
etc.

MAMBRINO CHIEF 11
sire of Lady Thorne
2:18¼, 5 others and
dams of 24 in 2:30, etc.

RODES MARE
dam of Lady Thorne
2:18¼ and granddam
of Loyalty 2:27, etc.

SWEET OWEN
son of Grey Eagle.

LUX. BY WAGNER.

Bow Axworthy comes from the great Axtell family through the very best son of that great progenitor—Axworthy, 3, 2:15½, sire of Hamburg Belle, 2:04¾, the best trotter out last year, General Watts, 3, 2:06¾, the world's champion three-year-old trotter, and as will be seen by reference to his tabulated pedigree is on of the greatest sires of extreme speed and colt trotters living.

TERMS: \$25.00 payable July 1, 1909. Usual return privilege if mare proves not with foal. For further particulars address

ALLANDALE FARM,
WARNER CARTER, Groom, - - - Fredericksburg, Va.

ENQUIRERS' COLUMN.

All inquiries must reach us by the 15th of the month previous to the issue, or they cannot be answered until the month following.

Renting Farms.

Will some of your readers kindly give through the columns of The Planter a general outline of the methods of farm renting throughout the South in general and Virginia in particular? I would like to hear both sides of the question discussed. The owner who leases, as well as the tenant, also the farm manager's side. By this latter I mean the man who is managing a farm either on salary or shares for a non-resident owner as well as one who resides near by.

Have been a reader of The Planter for the past five years, and hope at some not far distant time to make my home in the Old Dominion.

D. L. DAVIDSON.

Rood River, Oregon.

We shall be glad for some of our readers to give their experience on this subject. The systems of renting in force in this State are so various that it is difficult to reply to the inquiry with definiteness. Speaking generally, we may say that the most usual custom is to rent for a share of the crop, this share differing in various sections of the State and being usually coupled with provisions as to furnishing the whole or a part of the fertilizer to be used and the condition in which the land is to be left. We badly need a good settled system of renting which shall provide for the growing of crops in a proper rotation and the keeping of stock to consume the forage crops and the return of the manure to the land, with compensation for unexhausted fertility and improvements made, and especially which shall provide for the cultivation of the land in compact bodies rather than the present way of allowing the tenant to work small plots of land anywhere on the farm. The present system or want of system has resulted in the impoverishment of large sections of the State, whereas, under a proper system, improvement would result and thus be profitable to the owner and tenant.—Ed.

Sedeing Millet and Cowpeas Together.

Kindly tell me, can millet and whip-poor-will peas be sown together satisfactorily? E. N. MERCER.

Lancaster Co., Va.

Whilst we have many subscribers who grow cowpeas and millet together for a hay crop, we have never regarded it as a desirable mixture from the fact that if seeded at the same time the millet will mature long before the cowpeas have come to their best. The only way to obviate this is to sow the cowpeas a couple of weeks or

The Hotel CHELSEA

WEST TWENTY-THIRD ST., NEW YORK

Absolutely Fireproof

European Plan



Room, with use of bath	. . . . .	\$1.50
Room, with private bath	. . . . .	2.00
Suites—Parlor, bedroom and bath	. . . . .	3.50
	and upward	

The Hotel Chelsea may be reached from the Pennsylvania, Lackawanna, Erie, Reading, Baltimore and Ohio, and Jersey Central railroad stations, all at foot of West 23d Street, by cab or electric car direct in five minutes. West 23d Street, New York, ferries land passengers at Hoboken near steamship piers.

Buy Direct from Factory

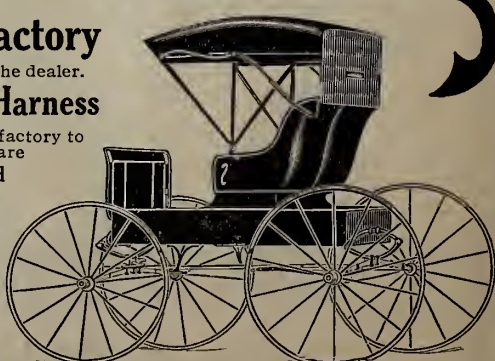
saving all expenses and profits of the dealer.
Elkhart Buggies and Harness

have been sold direct from our factory to the user for thirty-six years. We are

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selling to the consumer exclusively. We ship for examination and approval, guaranteeing safe delivery. No cost to you if not satisfied as to style, quality and price. Over 200 styles of Vehicles and 65 styles of Harness. Send for free catalog.

Elkhart Carriage & Harness Mfg. Co.
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Incorporated 1907.

"STANDARD OF EXCELLENCE."

Capital Stock, \$100,000.

THE VIRGINIA STOCK FARM CO.

Incorporated.

Bellevue, Bedford County, Virginia.

J. ELLIOTT HALL, General Manager.

An Exceptional Opportunity

Worthy of Your Most Careful Consideration

We are offering the Farmers and Stockmen of Virginia an exceptional opportunity for investing in a meritorious enterprise where they are more than amply secured by tangible assets of the very highest class—Real Estate and Live Stock—assets which increase in value all the time, instead of decreasing as is the case with most all other forms of investments. This is an investment of genuine merit—one which will net a handsome income as well as being safe beyond the possibility of a loss.

It Represents:

Absolute Safeness—
 Stock Exempt from Taxation—
 Choice Land, Rapidly Increasing in Value—
 Stock raising under most favorable conditions—
 Something the whole world must have—
 A Product Necessary to Civilization Itself—
 Most Profitable of all Safe Investments.

We Offer:

A limited amount of this Capital Stock in lots of not more than five shares to any one purchaser at the par value One Hundred Dollars (\$100) per share that we may develop the natural resources of the Company's farms and increase the herds to their full capacity, thus enabling us to meet the increasing demands for pure bred live stock of the highest quality—for "Standard Types" of the different breeds.

Two Acres of Land for Every Share:

Every share sold will be represented by two acres of choice land. Land that is increasing in value very rapidly. Real estate is the fundamental basis of all security—the Assets of the world's wealth are based upon Real Estate. It is the woof and web of every investment—Stocks, Bonds, Mortgages, Insurance Policies, Manufacturing Enterprises, Railroads, Transportation and of Civilization itself. Besides this Real Estate and the improvements that will be erected thereon from time to time, a sufficient security in itself, each share will be represented by about Forty Dollars (\$40.00) worth of Live Stock. Live Stock being an asset of equal importance to real Estate itself and one which multiplies in value more rapidly than any other property that may be termed absolutely safe in all respects.

Explanation:

Perhaps you are wondering why we are making the Farmers and Stockmen of Virginia this exceptional offer—why we don't offer this stock in larger blocks and to bigger investors. This is why—we can do so, but it would not accomplish our purpose. It would not give us the support and interest of a large number of stockholders. We want the Farmers of Virginia and all interested in the Agricultural Advancement of the Old Dominion as stockholders. We want the close, vital interest that only some form of partnership can give. We want the support of the Farmer—We want him to know what we are doing and to help us do it!

A Limited Amount for Sale:

We are only offering a limited amount of this stock for sale at this time and reserve the right to refuse any offer. We want stockholders in each and every county in the state and reserve the right to refuse offers from any county that already has several stockholders. Better not wait too long—delays sometimes mean lost opportunities. Write us for handsome illustrated booklet giving full particulars concerning this exceptional offer.

WRITE FOR BOOKLET TO-DAY—Don't lose this opportunity—Talk to us as you would to your neighbor—Let's get acquainted—Our proposition is an honest one and worthy of your consideration—Let us hear from you to-day.

"DO IT NOW."

Address:—

J. ELLIOTT HALL, General Manager,

BOX A,

BELLEVUE, VIRGINIA.

Note—Kindly mention this journal when answering this advertisement.

more before the millet and then to sow the millet and harrow it in. The harrowing will not hurt the peas if not delayed too long. We think cowpeas and sorghum a much better mixture, as they mature together better and make a heavier crop. The objection made to this mixture is that the sorghum makes too strong stalks to be nice hay, but this may be largely obviated by seeding the sorghum heavier so that the growth is not so strong. Half a bushel of cowpeas and a peck or a peck and a half of millet per acre makes a nice hay.—Ed.

Harrowing Wheat and Oats.

I would like to know if this can be done with success and what time would be best. Wouldn't this increase the grain and kill some weeds? I am not going to seed any grass.

Gloucester Co., Va. J. H. B.

Both wheat and winter oats can be harrowed with advantage when the land is dry in February or March, as we have many times advised in this Journal. At the time when we received your inquiry it was too late to do this.—Ed.

Velvet Bean—Teosinte.

Do you know anything of the Velvet Bean as a forage crop and soil improver? Do you know anything about teosinte as a green forage for horses and cattle? J. G. BAPTIST, M. D. Mecklenburg Co., Va.

The velvet bean is a very strong growing legume largely used in the Gulf States as an improving crop for the land. It grows well as far North as the James River, but will not mature its seed in this State. It is not well fitted for a forage crop, as the growth is coarse and woody and it is so difficult to harvest from its enormous tangled growth. It should be allowed to die down on the land and then be plowed under.

Teosinte is valuable as a forage crop especially in the States South of Virginia. It will grow in this State as far North as the James and make a heavy yield of forage, but no grain.—Ed.

Seeding Cowpeas.

I have a farm near Gainesville, Prince William county, Virginia, that is naturally very good soil, but has been run down from overwork, and I will sow this year a large quantity of peas with the object of improving the land, and am writing to ask that you give me your ideas as to when they should be sown, how much per acre, and if I should sow fertilizer with the peas, and if you would advise turning them under or cutting the crop. I expect to top dress the land with lime when I seed it in wheat or grass this fall.

Fauquier Co., Va.,
JAS. D. HALL, JR.

Sow the peas from May to the end



CLUB SHOT SHELLS FOR FUR AND FEATHERS

New Club shells are good. Nitro Clubs are better. The first are loaded with black powder and do the work but the second have smokeless powder, are steel lined and give much less recoil, noise and smoke. Both are "game getters" and their boxes bear the red ball U. M. C. trade mark. Look for it.

Game Laws of U. S. and Canada Free.

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Agency, 313 Broadway, New York, N. Y.



NITRO CLUB
SMOKELESS POWDER



NEW CLUB
BLACK POWDER

Fruit and Vegetable Growing in Manatee County

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SEABOARD AIR LINE RAILWAY
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OPPORTUNITY

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You could soon become independent in this land of plenty. One grove of Grapefruit netted \$2,500 an acre this year. Vegetable crops often net \$1,000 an acre. This book tells of splendid lands in this section that can be procured very reasonably. Sent FREE while edition lasts.

Address J. W. WHITE, Gen'l Industrial Ag't,
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CLAUDE G. STEPHENSON,
(Successor to Stephenson & Rainey, Herndon, Va.)

\$35⁰⁰ FANNING MILL FREE

A Fanning Mill Free. If there are no dealers near you selling the famous Racine Line of Farm and Warehouse Fanning Mills, that clean, grade, separate and bag all kinds of grain and seeds as well as cow peas, velvet beans, rice, peanuts, chufas, etc., then write today for particulars about our free mill to one person in each neighborhood who will furnish us his neighbor's names to whom we can write to call and see the mill and who will show what the mill will do when they call to see it.



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When your money, life and property are at stake,
why take any unnecessary risks?

Day after day you read of the robbers' work. It proves that the bank, and not your home, is the place for your money.

The Powhatan murder and robbery, followed closely by the Buckingham crime, are fearful examples.

There is but one safe course to pursue, and that is to place your money in a strong, safe, interest-paying bank and remember that the Planters National Bank has the **LARGEST SURPLUS AND PROFITS OF ANY NATIONAL BANK** South of Washington. This gives you greater protection for your money than is offered by any similar institution in the South.

Money Is Safe In This Bank

In the Saving Dept. of The Planters National Bank, your money will bring you **3% COMPOUND INTEREST** from the day you deposit it and you cannot put it in a safer place.

Banking with us by mail is simple and easy, in fact, it is even more convenient and less expensive than if you lived in Richmond and paid car fare to bring your deposit in person.

Write to-day for Booklet—"How to Bank by Mail."

PLANTERS NATIONAL BANK,

12th & Main Street,

RICHMOND, VIRGINIA.

Capital, \$300,000. Surplus and Profits, \$1,160,000



of June after the land has become warm. When preparing the land for the crop, apply 250 or 300 pounds of acid phosphate and 25 to 50 pounds of muriate of potash per acre and work into the land. This should give you a crop to mow for hay in August or September. Leave a good stubble when cutting the crop and cut this into the land with the disc after applying the lime and then seed to wheat without replowing. If the land is as you say—poor—it would be better to sow crimson clover after the peas and wait another year before seeding wheat, sowing a second crop of peas after turning down the crimson clover in the spring. You might then expect a good wheat crop.—Ed.

Sweet Clover—Mellilotus Alba.

For the past six months it has come to my notice that in some of our Western States there has been much exploitation of "Sweet Clover" as a forage crop; the claim being made—and seemingly substantiated—that all kinds of stock will eat it in preference to anything else, that the bitter principle which enters into its content is largely tonic, corrective of the bloating tendencies of most legumes, that it is rich in protein, and, finally, that it will make a heavy growth in soil which would starve out dog fennel or "pusley."

According to the dictum of its enthusiastic advocates (notably in Wallace's Farmer), the only condition necessary to its complete consumption by all foraging animals is close pasturing or frequent mowings; as it becomes very stalky if allowed to grow without such checks; but in that respect is no worse than alfalfa or crimson clover.

The writer saw last year as many as three very heavy cuttings of sweet clover along the right of way of several railroads in this State, and on one occasion asked a farmer whose pasture land came clear down to the railroad fence, why it had not spread into his fields. He said he had been watching that point also, and from the way his hogs had been rooting up all the land next to the fence he concluded they had been doing him a special good service in cleaning it out root and branch. "Too bad," he finally said, "that the pesky stuff is not worth something to something else besides the bees, for I never saw such a swift and rank growing a thing in my life."

Wherefore, let us hear from some one else anent the matter, for I am sufficiently interested to inquire if any one knows where the seed can be obtained, believing, from what I already know about the down-reaching and outspreading roots of the

Wool Wanted.

WE PAY TOP PRICES!

We will need a large quantity of wool this season to fill our orders, and want to handle your crop. We buy your wool delivered at your depot, free of any expense to you whatever, except freight charges, and are in a position to pay you top market prices. We furnish you with sacks to ship in when needed. Checks sent promptly day wool is received. Write us as soon as you are ready to ship, state quantity you have, and we will advise you what we will pay.

David Wallerstein & Co.,

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As to our responsibility and fair dealings, we refer to American National Bank, Dun or Bradstreet Agencies, or any merchant of Richmond.

THE REAL TEST OF ANY ROOFING

is the number of years it wears. But you ask, how can you tell which roofing will wear the longest before buying? We are going to tell you how. Get several samples of different kinds of roofing. Be sure that one of them is Vulcanite. Put them all to the following tests or any others you may wish.

FIRST, put a live coal on each piece, that will tell which is fire-proof. **NEXT**, put them between cakes of ice or expose them to zero temperature, that will tell how well they stand climatic changes.

NOW, soak them in water over night, that will show how well they turn rain and whether they will water soak.

THEN, immerse them in acid, that will tell whether they will soon become perforated—full of holes and leak.

Send them, twist them, to see if they crack, peel or the surface breaks.

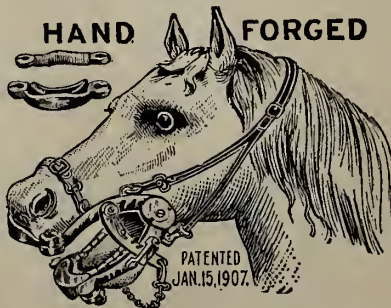
You'll find Vulcanite will withstand any test you give it and be just as fresh, tough, pliable as when first received. When you put it on your roof the real test of time will be even more gratifying. It has quality in it—that's why. It is not only the best roofing, but the cheapest. A postal brings a sample by return mail, also a book about roofing you ought to read. Sold by all dealers, if yours can't supply you write to us.

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Simplest, Strongest, Safest.



Capable of sustaining immense pressure—two sets of dental plates—interchangeable—introduced like ordinary bit—Can not possibly close of its own accord, or by jerking of the animal's head—Easily taken apart—weighs about four pounds.

Price, Net, \$9.00.

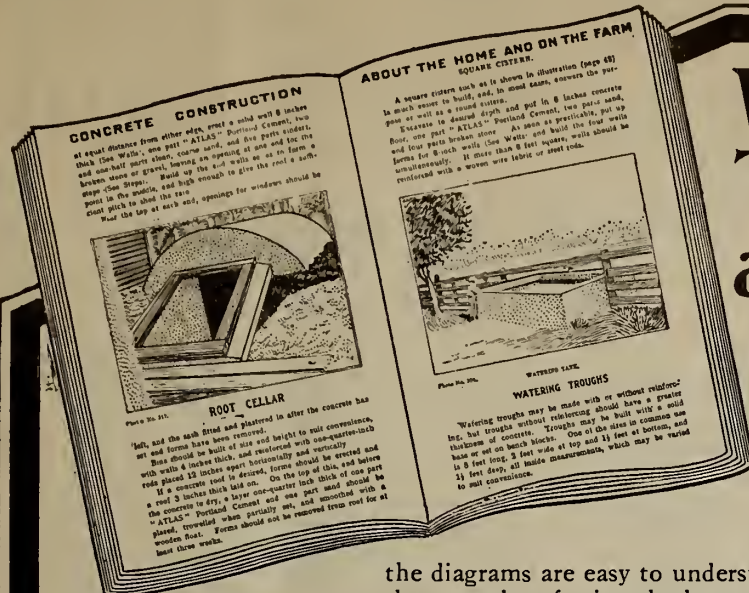
Write for catalogue of Veterinary Instruments, also catalogues of "Easy to Use" Instruments for cattle, for the horse, etc.

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It is called "Concrete Construction About the Home and on the Farm" and consists of 128 pages.

It goes about the subject of concrete construction in a plain and practical way, giving illustrations and diagrams of concrete barns, walks, silos, water troughs, etc., and tells how to make them. The instructions are clear and complete and

the diagrams are easy to understand. As you read this book you will see the necessity of using the best cement in all your construction work, or else your labor may go for nothing.

ATLAS is the highest grade of portland cement manufactured. There is but one quality, the same for everybody. **ATLAS** makes the best concrete because it is alike at all times in composition, color, fineness and strength.

4,500,000 barrels of **ATLAS** were ordered by the United States Government for the Panama Canal. The largest order ever given in the cement industry.

Ask your dealer for **ATLAS**. If your dealer cannot supply you write to

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Daily productive capacity over 40,000 barrels, the largest in the world.

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NONE JUST AS GOOD

weed, that with it I may be able to establish a sort of a sod on some sand dunes upon which I have been unable to negotiate as much as a meagre crop of sand fleas or even jiggers. And I want to use that land.

C. C. C. FARMER.

Charles City Co., Va.

Sweet clover is like all the other legumes valuable as a gatherer of nitrogen from the atmosphere and is therefore an improver of the soil when plowed down. It is not, however, grown anywhere in this or the adjoining States as a crop, as our stock will not eat it either green or cured as hay, whilst the other legumes, like clover, cowpeas and soybeans, are equally as valuable as improvers of the soil and are at the same time relished by stock of all kinds either green or cured. We are aware that stock eat the sweet clover in sections South and West, where the other legumes mentioned have not been so largely grown, but our stock seem to have an invincible repugnance to the plant and will not

MADE IN OUR OWN MACHINE SHOPS LITTLE SAMSON ENGINES

FOR FARM USE.

Built in 5 H. P. and 7 H. P. 5 H. P. weighs 2,100 lbs. 7 H. P. weighs 2,700 lbs. Equipped with Pickering Ball Governor. Just the engine for Threshing Wheat, Picking Peanuts, Sawing Wood, etc..

Sold at Reasonable Prices.

Write at once for particulars.

STRATTON & BRAGG COMPANY,

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We are the Leading Dealers in the Wool Trade in Virginia. HIGHEST MARKET PRICE PAID, and no Commission charged, only freight charges deducted. SACKS FURNISHED FREE. Checks remitted promptly. Correspond with us when ready to sell

WALLERSTEIN PRODUCE CO., 19 and 21 S. 13th St., Richmond, Va. References: American National Bank and Richmond merchants generally.

touch it even when growing luxuriantly on a bare pasture. We have seen cattle grazing close around the plants, but never saw one eat any of it, however hard set to find other food. Under these circumstances it can only, if grown, be used to turn under as an improver. For this purpose we think it might be grown with advantage on soils too poor to bring the other legumes as we have noticed it growing on very poor soil. The seed is offered for sale by some of the seedsmen in the further Southern and Southwestern States, but here is not offered. It might be worth trying on the land. The plant being a biennial does not usually make much of a crop the first year, but the second year comes on freely and will make a good green fallow by the early fall.—Ed.

Meat Rusting.

Will you kindly tell me the cause and how to prevent meat rusting, especially the middling?

W. H. STEPHENS.

Albemarle Co., Va.

The rusting of the meat is caused by exposure to the air. When the meat is cured it should be dried thoroughly and, if desired, smoked. It should then be covered with a coating of flour paste well seasoned with black pepper and borax, and when this is dry the meat should be wrapped in paper and the edges pasted close and then inclose in bags and hang in a dry, airy place. This will prevent loss and waste.—Ed.

Wood Ashes.

I have on hand a large quantity of ashes gotten from burning brush, stumps and roots of all kinds. What would be the best material to use with them on corn, peanuts and tobacco, and what quantity on poor land? And should it lay mixed in the barn for sometime, or would it be best to mix as used?

BEGINNER.

Dinwiddie Co., Va.

The ashes should be mixed with acid phosphate and applied to the land as soon as mixed. They have a small percentage of potash and a good deal of lime in their composition and, with the acid phosphate, will make a fair fertilizer for corn and peanuts if used liberally. You can use as much as a ton or two to the acre of the ashes without overdoing it. Use 250 or 300 pounds of acid phosphate per acre. For tobacco the ashes will be of little use, as you want a much higher percentage of potash than they will supply and you need this in the form of sulphate of potash. See the March issue for the best form of fertilizer for the tobacco crop.—Ed.

How to Increase the Yield of Fruit

Increased fruit crops are more often the result of good management than of good luck. Fruit trees and fruit plants need a liberal supply of

Virginia-Carolina Fertilizers

The trees absorb plant foods—that is, nitrogen, phosphoric acid and potash—from the soil just the same as any other crop. Experience has shown this over and over again. This truth has become so well recognized that "return to the land what the tree removes if you would expect the best results" has become an axiom with the best growers.

Apple, pear, peach, orange and other fruit trees soon respond to careful fertilization. But be sure to use the best fertilizers.

"I made a test with other companies' fertilizers," says Mr. H. O. Lowry, of Manatee County, Fla., "and yours proved to be the best. The yield where I used Virginia-Carolina Fertilizer, was just twice as much as where the other two companies' fertilizer was used." Hundreds of users say Virginia-Carolina Fertilizers are cheapest because of their good qualities—give better satisfaction and quicker results.

Many facts of great interest and value to fruit growers are published in the new 1909 Farmers' Year Book, a copy of which will be sent free on application to any of our sales offices.

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L. D. Phone, No. 3526.

Soy Beans, vs. Clay Peas.

1. Which is more beneficial to trucking land, soja beans or clay peas?

2. Does land receive much benefit from peas or beans when the vines are cut off for hay?

C. M. BALDWIN.

Norfolk Co., Va.

1. Where the soy beans are plowed down before the seed is ripe they will supply more nitrogen to the soil than cowpeas, but if the plant is left to ripen its seed much of the nitrogen gathered from the air is transferred to the beans, which are the richest nitrogenous feed we grow, and the improvement made by the crop in the land is much lessened. An experiment made at Blacksburg, however, showed that even used in this way the soy beans had added six per cent. of nitrogen to the soil. There is probably not much difference in the vegetable matter which either crop will add to the soil.

2. In the case of cowpeas, a crop yielding two tons of hay per acre will add 100 pounds of nitrogen to the soil. If the vines are taken off for hay, the roots and stubble will add about one-third as much nitrogen to the soil as the whole crop would have done.—Ed.

Killing Honeysuckle.

In your last issue I noticed some one asking how to kill honeysuckle. Will give my experience.

A few years ago I had two adjoining fields which I wished to cultivate as one. I moved the fence from between them. On the fence row in one place was a large patch of honeysuckle which extended out into the field from both sides. In the middle of April I hauled a quantity of brush and piled on it, and then burnt it. I commenced plowing the land the next day with a three-horse plow. When I commenced harrowing (I use a spring tooth harrow) I harrowed the place time and again, kept

THOMAS PHOSPHATE

{ **Basic Slag Meal** }

FOR WHEAT

CAREFUL EXPERIMENTS
have shown this phosphate to be one of
the best for this crop.

OHIO EXPERIMENT STATION

No. of plot	Fertilizer used	No. One	No. Two
		Bush Wheat	Bush Wheat
29	Basic Slag	32.00	28.83
26	Raw Bone Meal	29.58	26.17
27	Acid Phosphate	23.50	28.00

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 Results to { **Rhode Island** " "

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CHARLESTON, S. C.



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USED FROM OCEAN TO OCEAN FOR 27 YEARS.
 SOLD BY SEED DEALERS OF AMERICA.

Saves Currants, Potatoes, Cabbage, Melons, Flowers, Trees and Shrubs from Insects. Put up in popular packages at popular prices. Write for free pamphlet on Bugs, and Blights, etc., to

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A WISE FARMER SHOULD USE

LEE'S PREPARED AGRICULTURAL LIME

FOR Top Dressing, Wheat, Oats, Alfalfa, Grasses.

Apply 400 to 500 Lbs. Per Acre and Increase the Yields.

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A. S. LEE & SONS CO., INC.

RICHMOND, VA.

Send for Circulars Department A.

a fork there and piled the roots and burnt it. The next year in August I fallowed the field for winter oats and that finished the honeysuckle.

HUGH BROOKING.

Orange Co., Va.

Wood Ashes and Hen Manure.

I find the Southern Planter the best and most practical of any agricultural paper I have ever read.

What can be mixed with unslacked wood ashes as a fertilizer for corn? Also, what can be used with poultry droppings also for corn?

Fairfax Co., Va. GEO. C. SMITH.

Mix acid phosphate with both these substances when ready to use them in the field. The wood ashes supply practically only potash and lime and the hen manure little beyond ammonia, and corn, especially needs phosphoric acid.—Ed.

Dairying in the South—Hen Manure—Sheep and Goats—Ducks—Chufa—Bermuda Grass, Etc.

As I expect to be a Southern planter before many months, would like a little information. I expect to start a stock and dairy farm.

1. Are there any creameries or other good wholesale markets for cream (or milk) in the South? Would rather sell the cream, so I could have the skim milk for pigs and save heavy cartage on milk. What are the market prices?

2. What is the value of hen or duck manure (if any) for fertilizer for Southern corn, and how is the best way to use it?

3. Would it do to let sheep and Angora goats run the same pasture together?

4. Would Pekin, Indian Runner and Muscovy ducks cross if they ran together? I have raised Pekins and Muscovys, but never kept them the same time, and have never heard whether they would cross bred or not

5. Would chufa nuts grow in that section by just punching holes with a crowbar in the hog pasture and dropping seed in them, or would you have to cultivate to get started?

6. Is Bermuda grass of much value as a hog pasture?

7. About how many months can you make good milk and beef on natural pasture without grain. About five months is the season in this State.

Am very much pleased with your paper, and will say that it is the most complete farm paper I have ever taken and I have taken the Country Gentleman, New England Homestead, Farm Journal, and several others.

A NEW SUBSCRIBER.

Waterbury, Conn.

1. There are several creameries in operation in this State and others are being established and there are good markets for both cream and milk in

ESTABLISHED 1850.

1,200 ACRES.

TREES!

We are wholesale growers of first class nursery stock of all kinds, Fruit, Shade, Ornamental Trees, Shrubby, Hedges, Small Fruits, etc., Asparagus, Strawberries, and California Privet in large quantities.

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Baltimore, Maryland.

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WE ARE GROWERS AND OFFER A FINE ASSORTMENT OF

APPLES,
CHERRIES,
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PEACHES,
PLUMS,
GRAPE VINES,
STRAWBERRIES,
ASPARAGUS,
SHADE TREES.

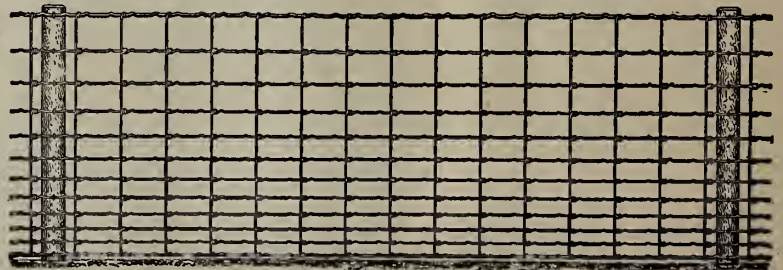
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Turns Cattle, Horses, Hogs—Is Practically Indestructible



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Buy your new fence for years to come. Get the big, heavy wires, the hinge joint, the good galvanizing, the exactly proportioned quality of steel that is not too hard nor too soft.

We can show you this fence in our stock and explain its merits and superiority, not only in the roll but in the field. Come and see us and get our prices.

Our complete Catalogue of Improved Farm Machinery sent to any address free.

THE IMPLEMENT COMPANY,
1502 E MAIN ST. - - RICHMOND, VA.

our cities and all through the cities of the South, which are at present poorly supplied with cream and milk. Notwithstanding this, many of the dairymen now operating in this State find their best markets in Washington and New York and ship cream there and, where sufficiently near, also ship milk. The wholesale price for milk in this city varies from 12 to 18 cents according to the season. Cream is sold according to quantity of butter fat. The average cream is worth 80 cents.

2. Hen manure can be utilized in making fertilizer for corn by mixing with plaster or dry earth, as made to conserve the ammonia, and drilling this in the rows, but it requires to be supplemented with acid phosphate, as that is what the corn crop mostly needs in this soil. Hen manure is rich in ammonia, but lacks phosphoric acid and potash. Duck manure would be best mixed with farm yard manure, as it is too watery to be handled separately.

3. Sheep and Angora goats can run in the same pasture. They will run in separate flocks and not meddle with each other.

4. The different breeds of ducks will cross breed if run together. A hybrid of the Muscovy is sterile, but not so with the others.

5. Chufa nuts will grow anywhere in the South in the Middle and Coastal Plain sections. They are very much of a weed and we do not encourage their growth except upon waste land not likely to be used for any other purpose than a hog pasture. They are easily started and bad to stop.

6. A Bermuda grass pasture is an excellent summer pasture for cattle and hogs and succeeds better than any other pasture grass in all the Coastal Plain sections of the Southern States.

7. Our cattle usually graze out from April to the end of November. This winter there has scarcely been a month when they could not have grazed out during the day where proper pastures had been grown for them, but our native grasses require to be supplemented by pastures of crimson clover and winter grains to carry over this long season. Most of our native grasses other than blue grass are annuals only and die off in late fall.—Ed.

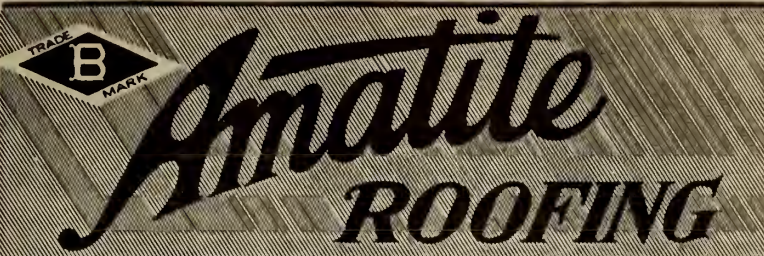
White and Yellow Corn.

1. Has yellow corn a higher feeding value than white?
2. Which draws more heavily on land?
3. Is there any difference in the stover?

W. F. WATSON.

Fairfax Co., Va.

1. There is practically no difference whatever in the feeding value of white and yellow corn.
2. As the white corn usually grows more stalk and blade than the yellow varieties, it is probable that the white draws more heavily on the land. Yel-



**AN EXPERIENCE
AT THE BELLE MEADE FARM**

The Belle Meade Farm of Bedford, Mass., is well known for its thoroughgoing and scientific methods, and is a model in many respects. Its big stables are all covered with Amatite Roofing. The owners write us as follows:

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If the Belle Meade Farm people had chosen a "smooth surfaced" roofing it would have cost them more in the beginning and the difference would have

become greater every year. Those roofs were laid in 1905. In 1907 they would have required a thorough painting, which would have to be repeated in 1909 and every two years thereafter.

The Amatite, however, has had no painting, and needs none. The mineral surface takes care of that. When the roof finally wears out and the owners of the Belle Meade Farm compute the cost of their Amatite Roofing, they will put down "for the Amatite, so many dollars;" "for care of same, nothing." If they had used a painted roofing there would probably be several coats of paint to figure on, besides the original cost of the roofing, and the total would be several times as much as Amatite.

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low corn will usually make a better yield on poorer land than white would on same land.

3. There is no difference in the value of the stover as feed.—Ed.

Harvesting Cowpeas.

Will you be kind enough to tell me the best method to harvest a crop of cowpeas sown amongst corn; whether to harvest them with the mower or to rake them with the hay rake?

To use the former method, will the corn stalks interfere with the cutting? To use the latter, I am afraid I will lose the best part of the nitrogen by pulling up the roots.

SUBSCRIBER.

Loudoun Co., Va.

Cowpeas grown amongst corn are not usually harvested for a hay crop, but are either cut with the corn when it is cut down by a corn harvester and then shredded with the stover, or they are grazed with hogs or turned under or cut into the ground with a disc as a preparation for wheat seeding for which purpose they are generally grown in this way. If, however, the corn is cut down by hand and care is taken to cut it off close to the ground, the cowpeas could be harvested with the mower by raising the cutter bar so as to clear the stumps of the corn stalks. To harvest them with the horse rake would no doubt pull up some of the roots and to this extent rob the land of some of the fertility gained by the crop, but we do not think this would amount to much, as probably most of the pea vines would break off at the ground, as the roots are deep feeders and not easily pulled out.—Ed.

Plants Hybridizing.

Please tell me through enquirers' column if the new Valencia white peanut, when planted near the ordinary Spanish variety, will hybridize to any extent. Also cowpeas and soja beans.

MRS. JENNIE ZAZIC.

Where plants are of the same botanical family, they will almost all hybridize when planted near together, and we have little doubt but that the different varieties of peanuts will do so. Cowpeas and soy beans will not hybridize, as they belong to different families.—Ed.

Mare Sick.

Can you tell me what to do for a seven-year-old mare that is badly run down in flesh? Her appetite is good, is full of life, but nothing she eats seems to increase her flesh. She raised a colt the past season, and has never been the same animal since the colt was born. Her hind legs are straddled in starting off, and her water dripping. In making water in the stable, she groans and strains

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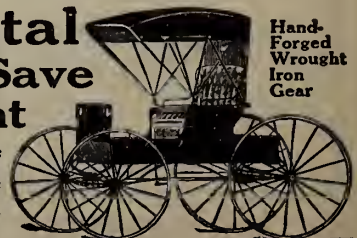
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W. C. FIELDS.

Cumberland Co., N. C.

We think the mare is suffering from some form of disease of the kidneys, of which there are many. You should have her examined by a veterinarian. In nearly all these diseases the building up of the system and general health of the animal is of the first importance; hence, a course of tonics should be given. Try the following: Phosphate of iron, 2 drams; nux vomica, 20 grains; powdered gentian root, 4 drams, given daily. Next, relieve the kidneys as far as possible by throwing their work on the skin and bowels. To affect the skin, keep in a warm stall and well clothed and give dram doses of Dovers powder, and boiled flaxseed should be added to the drinking water. A mustard plaster applied over the loins may also be of considerable help.—Ed.

Hog Husbandry.

Kindly criticize in your inquirers' column this plan: I have four acres of corn in which cowpeas will be sown. Corn will be removed promptly and land disc-harrowed four times. A mixture of red, sapling and alsike clover will be sown at once. Later, I will run a good big hog fence about this and as much more woodland. I want to put twenty-five pigs on this lot on May first with little or nothing more till cowpeas come. Then I shall let them eat a part of the pea field every day, and at last a finish of corn. I want them to bring me \$10.00 each on the hoof by November first. Now, am I going to be fooled? I know a little grain along at first will help, but maybe I can't do it. Will this work as I have outlined? The land is strong and seems to take clover well. I was much taken with the inquiry and answer in last Planter of getting up a farm by grazing cattle. In my circumstances hogs will suit me better if my plan is practicable.

"POWHATAN COUNTY."

You will be much more likely to make a pasture to carry your hogs up to the time when cowpeas are ready to graze next year if, instead of discing the cowpeas into the land after the corn is cut, you sow in the cowpeas and corn in August a mixture of ten or twelve pounds of crimson clover, a like quantity of red, sapling and alsike clover, and two pounds of Dwarf Essex Rape per acre and let the cowpeas mature on the land and fall down. They will shade the clovers and these will grow up through the vines and by April you will have a crimson clover and rape pasture which will be ready to graze and the red sapling and alsike will come on to follow the crimson clover and make grazing until cowpeas are



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MRS. O. REED.

Nottoway Co., Va., Feb. 15, '09.
I like the Southern Planter better than any farm magazine I know of.
C. H. S. HALLETT.

ready. If you sow only the red, sapping and alsike late in the fall it will be but very short grazing in May. Hogs on these grazing crops should always have a little corn every day, otherwise they will not make good growth. The grazing crops are a maintenance ration, but not much more than this until the peas are coming to maturity in the cowpea crop. After there are plenty of peas, then the corn may be cut off or much lessened until peas are scarce, when corn should be fed to harden and complete the feeding. You should succeed in this way and especially so if your wood lot will provide additional feed from mast and grazing.—Ed.

Rotation—Red and Crimson Clovers—Saving Crimson Clover Hay—Profit in Horses.

Please answer the following in May Planter:

1. How would the following be for a three-year rotation on forty-five-acre farm: First year, corn; second year, crimson clover, same having been seeded in corn last working; third, wheat or oats? The foregoing are about the crops I wish to grow. Isn't the above the best order in which to place them?

2. How would it do to sow half red clover and half crimson clover, so as to have the crimson to cut and the red to fallow for wheat? Will they grow together? Would it pay to grow red clover with the wheat the only object being to get a fallow for the corn which would follow?

3. Give best methods of saving crimson clover hay. Will it stand being housed the day after cutting, provided there is no dew or rain on it? What is the percentage of risk from spontaneous combustion caused by storing hay green?

4. Is there any profit in raising young horses, selling at three-year-old, at average price of \$100?

5. Will it pay to grow crimson clover hay at \$12.00 a ton with commercial fertilizer?

6. Which pays better, cutting crimson clover for hay or sowing for seed at, say, \$4.50 per bushel?

READER.

Westmoreland Co. Va.

1. We would amend the suggested rotation by following the crimson clover with cowpeas. The crimson clover can be cut for hay or be turned under in May, and there is then plenty of time to grow a cowpea crop for hay before the land is required to be gotten ready for wheat or winter oats.

2. Crimson clover and red clover are often sown together. The crimson clover comes off in May and then the red clover makes a fall crop. We would not sow red clover with the wheat. It is a very uncertain crop and you do not need it if you follow the rotation suggested as you get two

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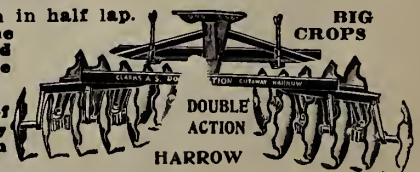
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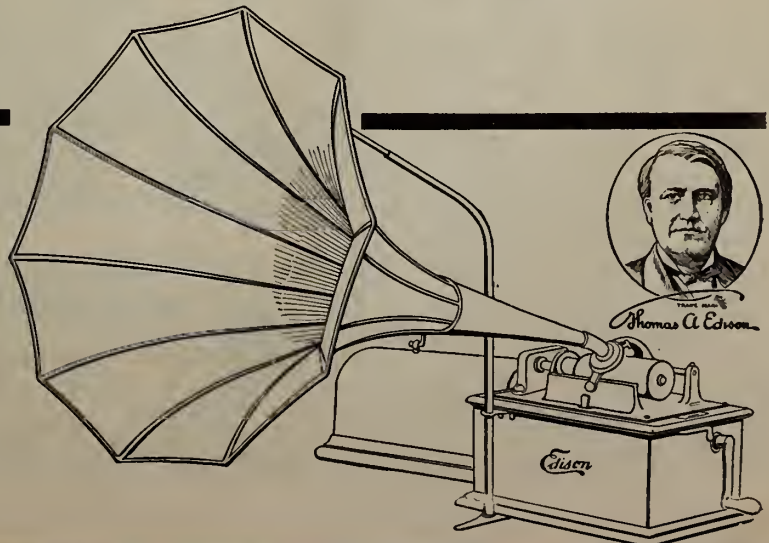
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recuperative crops in each rotation.

3. Crimson clover should be cured as much as possible in the windrow and cock to preserve the leaf. As the weather at the time when it is ready for cutting is not usually over hot it takes more time to cure than a summer hay crop and it should be thoroughly cured before storing or it will spoil or may burn. We believe that more barns are burnt down from the spontaneous combustion of hay stored therein than is confessed, but what is the percentage we do not know. We know spontaneous combustion will happen because we have seen it when hay is stored before properly cured. We do not advise over-drying hay, but want it free from water and dew and with only such a percentage of natural moisture in it as will cause it to heat reasonably in the barn.

4. If there is profit in raising three year old steers and selling them at \$100 per head and there is under ordinary farm conditions of raising and feeding, then there ought to be in raising and selling horses at the same age and price. A horse costs no more to raise than a steer and is not required to be made fat in order to command a market.

5. We think so.

6. We think the hay would pay better. Of course, this depends on the quantity of seed grown. The crop varies much according to season.—Ed.

Carbide for Whitewash.

I believe, from my own experiments, it would be of great value if you could ascertain and publish how to treat carbide (by-product from acetylene gas) so that it may be used in spray pump for exterior whitewashing. For those farmers using acetylene, the by-product used as whitewash, for interior disinfecting as well as for exterior, would, when the cost of lime is considered, pretty nearly give them their lighting free of cost. While still comparatively freshly drawn from the gas generator, the carbide works splendidly through any good spray pump, and is dazzling white after being applied. But when the woodwork is exposed to rain, this whitewash does not last. I have tried salt, grease, etc., which help some, but shall not be satisfied until the whitewash lasts as well as any formula with lime.

I have corresponded with the Carbide people on this subject, but have not obtained anything practicable yet. But if you could induce them to experiment until they worked out a good whitewash, they would doubtless find the use of acetylene spreading. It makes a splendid light, and a farmer having the whitewash there to use -- throw away would disinfect chicken pens cow sheds and watery; whereas, having me, he probably neglects a good farm management than he should. The in-

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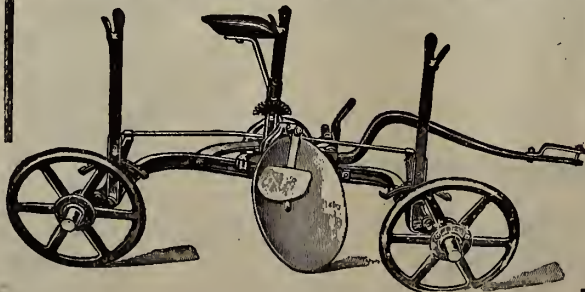
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terior disinfecting, applied with a hand spray pump, covering roofs and corners, perches and rafters, can be done in rainy weather, and this time, so often wasted could not be more profitably spent.

Also, another question. Might this by-product be substituted for lime in making Bordeaux and lime-sulphur sprays? If so, how?

Your reply will greatly oblige every rural consumer of acetylene gas, including,
E. P. LYLE, JR.
Prince George Co., Va.

Try the mixture used in making the well-known Government Whitewash, using the carbide instead of the lime. The following is the formula for Government Whitewash: Slake half a bushel of good fresh lime in boiling water keeping it covered during the process. Strain and add a peck of salt dissolved in water, three pounds ground rice boiled to a thin paste, half a pound of Spanish whiting, and a pound of clear glue dissolved in warm water. Mix well together and let the mixture stand for several days. Keep in a kettle and put on as hot as possible. We would not venture an opinion as to using the carbide in making Bordeaux mixture. This is a question for the Chemists to determine, and we shall be glad if some member of the staff at the Experiment Station, where the Bordeaux mixture is being used, would look into the matter and advise upon it. The acetylene gas people should be sufficiently interested in the subject to investigate and report upon the utilization of the waste carbide.—Ed.

Nux Vomica for Chickens.

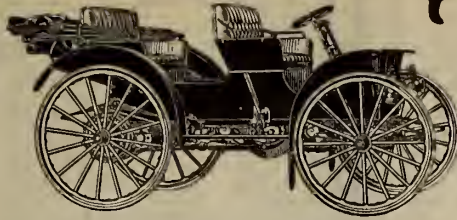
Please tell me through the Southern Planter how much nux vomica to give to chickens, and must it be given every meal in order to kill the hawk? The druggist who sold it does not know how much and how often it should be used.
B. S. GILL.

See the April issue, where this question is answered.—Ed.

Crop Rotation.

Last year I sowed crimson clover or German clover in my corn when it was last plowed. It came up well, looks well now—three inches high. I wish to plant this land for corn again—last year was first time the land had been ploughed for several years. I got from it about fifty bushels to the acre. It will be ploughed the coming week regardless of the clover. I will then plant corn on it. At the last ploughing of this corn I wish to sow cowpeas and soja beans, mixed; then when ripe, let my hogs on it. I think you then advise to sow clover, rye, etc., and next spring plow for corn, etc..

Now this question. If my clover sowed last July or August say wont get higher than three inches by May



THE CAR FOR BUSINESS OR PLEASURE

The International Auto Buggy has come to take the place of the former's carriage or runabout and the driving team.

It is carriage and team all in one. And anybody who can be trusted with a team of horses can operate it with perfect safety.

The Auto Buggy is emphatically the vehicle for country road travel. It has every advantage that the family carriage or runabout has and many advantages which these vehicles do not have.

It is always ready to go anywhere. Rough, muddy or hilly roads do not impair its usefulness.

When there is a trip to town to make, or other errand to do, it is not necessary to take the team from the plow or to stop the farm work.

It does not require to be watered or fed.

It does not get "fagged out" as the horses do on a long journey.

You can go at a faster clip than you can with your driving team and you can keep it up all day long.

Perhaps the greatest feature about the International Auto Buggy is its simplicity and easy control. There is nothing complicated about it and any member of the family over ten years old can learn to run it in a very short time.

The Auto Buggy has solid rubber tires. There are no tire troubles. It is operated by a thoroughly reliable air-cooled gasoline engine. It is propelled by applying power to both rear wheels. It is chain driven. There are no cog wheels to break and put it out of action.

The Auto Buggy is a rare combination of both a pleasure and a business vehicle. The springs and comfortable seats make it easy riding. Passengers are protected from flying mud and water, no matter how fast the Auto Buggy is speeding. The rear seat and top may be removed, and the Buggy turned into a handy, light-running and capacious carrying vehicle. A ten-feed mechanical oiler makes oiling an easy matter. The tread is the same as that of a standard wagon. The seven gallons of gasoline which it carries is sufficient for a journey of 75 to 100 miles, making surprisingly cheap as well as pleasant transportation for its load of passengers.

The following letter is one of many we are receiving from all over the country, setting forth the complete satisfaction that the International Auto Buggy is giving:

New Brunswick, N. J., November 30, 1908.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, Philadelphia, Pa.

Dear Sirs: You will undoubtedly remember that I placed an order with you the past season for two Autos, one of which I have been using for the past six months, and I have certainly given it some of the most severe tests that a motor car could be put to, and it has overcome all obstacles and meets my approval in every respect. I have driven the car up and down steep hills, through mud and sand, and the power of the engine and the excellent control one has of the car make it reliable and dependable at all times. I also like your high wheels, solid tire, and for my own use in the real estate business and for a selling agent, I am convinced that your cars are the best of their kind on the market today. Yours truly,

ALBERT SERVISS.

Take the matter up with the International local agent and get a catalogue and further information. Or write direct to the home office.

International Harvester Company of America, Chicago, U. S. A.

(Incorporated)



More Potatoes with Less Labor

If you raise potatoes in a small way, you can save time and money, and do away with a lot of hard work by using a

Success Jr. Digger

(Hallock's Patents)

O. K. Elevator Digger for Large Crops. Send for new 48-page catalogue describing our full line of Potato Diggers, also Grain Drills, Corn Planters and other farm tools. We also manufacture Engines, Boilers, Saw Mills, Threshers, etc. Catalogue mailed free on request.

A. B. FARQUHAR CO., Ltd., Box 902, York, Pa.

THE IMPROVED RANEY CANNING OUTFITS

The Simplest and Finest Process Ever Invented.

Made in All Sizes, and Prices from \$5.00 Up, and Well Suited to Both Home and Market Canning—25,000 of Our Outfits Now in Use.

The finest Canned Goods in the World put up by farmers and their families. Write now, and get our free catalogue, giving full information, and prepare for the next crop.

THE RANEY CANNER CO., Chapel Hill, N. C.

Western Address: Texarkana, Ark.-Tex.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

first how can I expect it to get higher by May first if sowed in November or December after my hogs have been turned on to the peas and beans? I wish you would tell me what to do for I cannot see my way. My land is rich—red chocolate soil—good for hay, corn, etc. I wish to improve it; also, to get feed for my hogs—Chester Whites, thoroughbreds.

WILLIAM CHIEVES.

Loudoun Co., Va.

It would have been better had you left the clover till in bloom at least. The best corn crop grown here last year was after the clover was completely dead. There was then plenty of time to make a crop here. But our season is longer than yours. You could, however, get a better crop by letting the clover bloom.

It will be a good plan to sow peas among the corn, but it will probably be too late to sow crimson clover after the hogs have eaten the peas, and I think that it would be best then to disc the land fine and sow to winter grain instead of running it in corn again. Then seed to clover and have a clover sod to turn the next time the field comes in corn. Or, you might sow rye and crimson clover after the peas are eaten and if the clover fails will at least have the rye. You can plant corn any time in May and will get more benefit from the clover to let it get more mature.—W. F. Massey.

Cowpeas and Sorghum.

Will cowpeas or cowpeas and sorghum improve land and make a satisfactory and fattening grazing crop for cattle? If so, kindly state what kinds to use and how to plant them. Do they cause bloat, and how many cattle will an acre carry through August and September when grass is short? Will soy beans grow well without inoculation?

Can you give information in regard to "Colorado Winter Vetch?" Have seen it highly recommended for permanent pasture, especially for hogs.

Loudoun Co. Va. TRYO.

Cowpeas and sorghum make an improving crop for land when the sorghum is not allowed to stand too long and mature its seed. Where the seed is matured the improvement will not be much as the sorghum seed will utilize most of the fertility gathered by the peas. But used as a grazing crop, it will be all right, or, if cut for hay before the seed matures. This crop has not been much used as a grazing crop for cattle because of the risk from bloating. If, however, care is used in turning the cattle on this can be avoided. They should not be turned on when dew is on the vines, nor until they have had something else to eat first, so that they will not be ravenously hungry and gorge themselves with the succulent forage. Do not let them stay on more than an



H. C. Phelps

**Here's Your Chance!
Save Big Money on Buggy**

If you are in the market for a buggy, write us a line on a postal, and we'll quote our prices for 1909.

We'll make to your order a genuine Split Hickory Buggy—save you from \$26.50 up—and ship at factory prices. Find out how much buggy value your cash money will buy direct from the manufacturer.

Let Us Quote You a Price on a Split Hickory Vehicle

We can't tell you all about our great selling plan in this advertisement—we want to send you our Big Free Book—which tells the story in detail—describes all our 125 Vehicles and full line of high-grade harness—tells you how we make buggies to order—sell them direct on

30 Days' Free Road Test

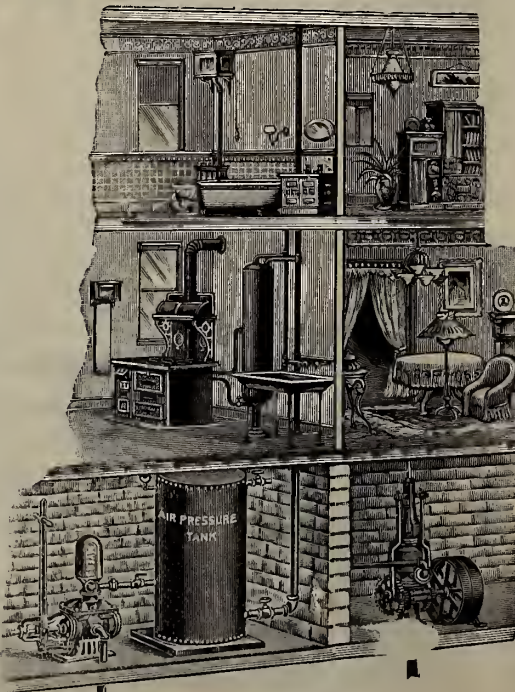
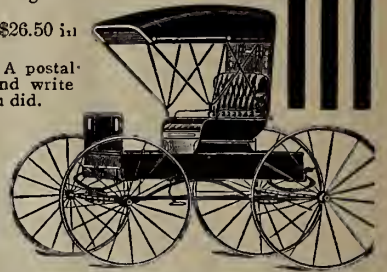
All Split Hickory Vehicles are guaranteed for **Two Full Years.**

This splendid top buggy means \$26.50 in your pocket—where it belongs.

Don't you want our Free Book? A postal will get it—take a minute's time now and write for it. Write today—you'll be glad you did.

H. C. Phelps, President
THE OHIO CARRIAGE MFG. CO.
"Makers of Split Hickory Vehicles"
Station 249, Columbus, Ohio

Note:—Celebrated Sheldon French joint Automobile Springs used on all Split Hickory Vehicles making them positively the easiest riding buggies on the market



HOT AND COLD WATER

All Through The House Can be Had at a Cost of From **\$75.00 Up.**

**GASOLINE ENGINES
WIND MILLS
TANKS
RAMS**

Estimates Free
Sydnor Pump & Well Co., Inc.
Dept. B Richmond, Va.



A Running Water Supply Plant

that takes care of itself—furnishes its own power—requires no attention or repairs—that is what you get in a **RIFE HYDRAULIC RAM** foot of fall from any nearby stream, spring or pond. Any capacity for all Home and Farm uses, Irrigation, Town Plants, Railroad Tanks, etc. Low in cost, high in efficiency. Satisfaction Guaranteed. Plans, Estimates and Book FREE.

RIFE ENGINE CO., 2113 Trinity Bldg., New York

CLAUDE G. STEPHENSON, Virginia Properties

HERNDON, VA.

Herndon is the center of the Dairy interests of Northern Virginia. It is located on the Bluemont Div. of the Southern Ry., only 27 miles from Washington, D. C.

Specialty of farms and estates in the counties of Loudoun and Fairfax. Best of land, fertile, rolling and well drained; NO SWAMPS and NO MALARIA. Communities made up of intelligent and prosperous people.



View of House on "B."

"B." A fine stock farm of over 340 acres of good blue-grass land in the famous BLUE-GRASS Region of Loudoun; about 20 acres in hard wood timber, balance in high state of cultivation; fine grass. Well fenced, with stone and wire chiefly, and in tip top shape, Rolling and well drained; splendidly watered with spring or running stream in every field. Fine old stone house of 9 rooms, some 19x19 feet; high ceilings; barn, tenant house and farm buildings; all in best condition. Small orchard Five miles from good town on the R. R.; fine neighborhood. Reasonable terms if desired.

This is an excellent farm in every way; soil of the very best; improvements good, and beautifully located in a charming country, the REAL farming and delightful "home" region of the State.

The illustrations will give you some idea of the fine old stone dwelling and the gently rolling character of the land in the midst of attractive scenery.

Come and look at this and other properties. Take the Bluemont Division of the Southern, from the Union Station in Washington. Write or wire in advance if possible.

"H." A good small dairy farm of 160 acres equipped for 25 head; silo, dairy buildings, etc.; good house; convenient to shipping station. Price and terms reasonable.



View of Fields on "B."

STOCK FARMS

In the beautiful blue grass region of Loudoun.

BEST OF SOIL.

BEST OF GRASS.

BEST OF WATER.

BEST OF COMMUNITIES.

BEST OF IMPROVEMENTS.

BEST OF SCHOOLS.

The ideal stock country.

The ideal "home" country.

Most accessible of good properties.
Most convenient to the real markets of the East—Washington, Baltimore, Philadelphia and New York.

CLAUDE G. STEPHENSON,
VIRGINIA PROPERTIES.

HERNDON, . . . VIRGINIA.

hour in the middle of the day at first until they become used to the feed. As to the quantity of cattle a crop will maintain, this depends on the growth. A heavy crop of peas and sorghum will make two to three tons of hay per acre and probably the green weight would be something like six tons. From this you can estimate what stock it would carry through two months.

Soy beans on rich land will often make a fair crop without inoculation, but usually they make a much better yield the second year of sowing, when the land has become inoculated. In the last issue of The Planter, you will find an article dealing with this question.

We do not know the Colorado Winter Vetch by that name. There are three species of vetches grown in this country—the Hairy vetch, the Winter vetch, and the Spring vetch. These are all annuals and, in the South, should, as to the first two, be sown in the fall and mature their growth in June or July; the Spring vetch should be sown in early spring and completes its growth by June or July. Of these different vetches, the Hairy vetch has been found to be the most valuable in the South. It makes good spring grazing for hogs or cattle, or a good hay crop to cut in May or early June.—Ed.

Yield of Milk and Butter.

I have a Holstein heifer two and a half years old that has recently dropped her first calf, and is now giving three gallons of milk and making one and a half pounds of butter per day. I would like to have your opinion as to what you would estimate the quantity of milk and butter she would likely produce on the advent of her third calf. This is the first calf I have raised, consequently am not posted on the subject.

2. Would also like to hear from some of your subscribers as to whether a cow makes more butter (in proportion to the amount of milk given) when just coming in fresh, or when the calf is about six months old. Your opinion on this query says "when fresh," but all I have interrogated on the question are at variance with your opinion, consequently am most anxious to hear from the "rank and file" of some of your numerous subscribers.

JOHN K. MYERS.

Warren Co., N. C.

It is absolutely impossible for any one to say what milk and butter a cow is likely to give on coming fresh after any particular calving. Usually, where a heifer makes a good showing after the first calving, it may be expected that she will continue to make an increase with each calving until she is six or seven years old, but not infrequently there will be one or more times between the first calving

LARGEST VEHICLE MAKERS IN THE WORLD

Studebaker

THE STUDEBAKER PLANT COVERS 101 ACRES

**Wagons
Built on
Honor**

For 57 years the house of *Studebaker* has stood for wagon honor. When you buy a *Studebaker*, you get the *best wagon* the great *Studebaker* factory knows how to make. There is no guess work about it. They take no man's say so about the quality of material they buy. Everything—wood—iron—paint and varnish—must come up to the *Studebaker* specifications.

See the Studebaker Dealer

It will pay you. Get his prices on *farm wagons, buggies, carriages and harness*. *Studebakers* are the best that money can buy, because only the very choicest materials, such as are obtainable only through the facilities of the world's largest vehicle factory, are used in their construction.

No one ever questions *Studebaker* superiority.

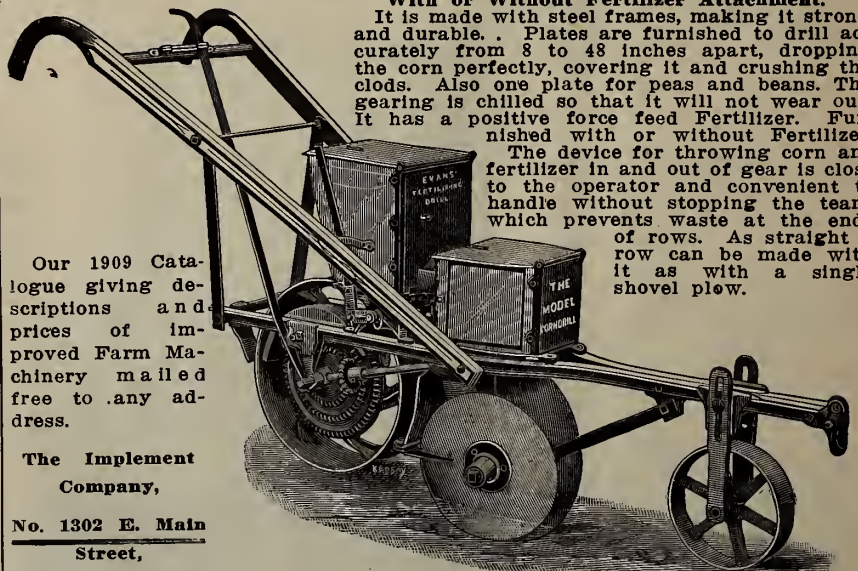
If you don't know a Studebaker dealer, let us send you his name.

Studebaker Bros. Mfg. Co.
South Bend, Indiana



Evan's "Model" Disk Corn Planter for Corn and Peas.

With or Without Fertilizer Attachment.
It is made with steel frames, making it strong and durable. Plates are furnished to drill accurately from 8 to 48 inches apart, dropping the corn perfectly, covering it and crushing the clods. Also one plate for peas and beans. The gearing is chilled so that it will not wear out. It has a positive force feed Fertilizer. Furnished with or without Fertilizer. The device for throwing corn and fertilizer in and out of gear is close to the operator and convenient to handle without stopping the team, which prevents waste at the ends of rows. As straight a row can be made with it as with a single shovel plow.



Our 1909 Catalogue giving descriptions and prices of improved Farm Machinery mailed free to any address.

The Implement Company,
No. 1302 E. Main Street,
Richmond, Va.

Here Is Something New From Kalamazoo

Prove for yourself in your own home, that the Kalamazoo is the most perfect—most economical—most satisfactory range for you to use—Your money back if it's not.
Send for Catalog No. 400 with special terms and compare Kalamazoo prices with others

Cash Or Time Payments

We want every housewife to know the comfort and convenience of a Kalamazoo in her home. You can buy on **easy time payments** or pay cash if you like. Either way—you save \$10 to \$20 on any stove in the catalog. We make it easy for responsible people to own the best stove or range in the world.

We Pay the Freight

Kalamazoo Stove Co.
Kalamazoo, Mich.

"A Kalamazoo Direct to You"



How the Farmers Voted



We recently offered a beautiful calendar to **every** farmer sending us his name and address and telling us how many cows he had and **what make of cream separator he owned.** We received many thousand replies. **Every one of these farmers told us the name of his separator.** It was just as though the farmers had voted to decide which cream separator is best.

Almost Half Say Tubular

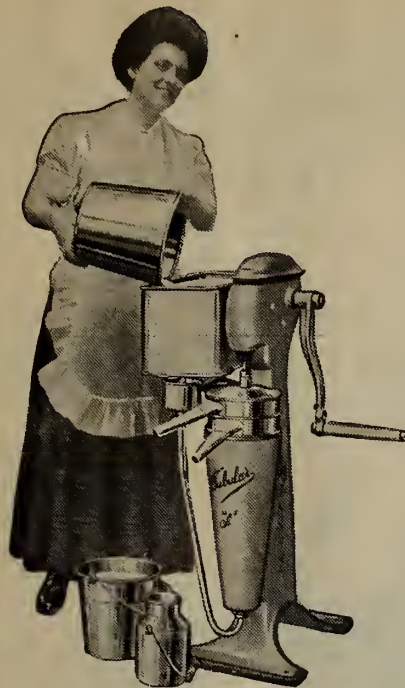
More than 41 per cent.—**almost one-half**—of all the separators owned by these many thousand farmers are Tubular separators. There are **more than twice as many Tubulars** as the three leading "Bucket bowl" separator **combined.** This absolutely proves that **farmers like Sharples Tubulars best.**

This is the farmers' verdict. Farmers are so thoroughly convinced that Tubulars are way ahead of the very best "bucket bowl" machines that they have bought over twice as many Tubulars as they have of the three leading "bucket bowl" separators combined.

You will make no mistake in buying a Tubular: Made in the world's greatest separator factory. 1908 sales way ahead of 1907—out of sight of most, if not all, competitors combined. The additional fine features of our 1909 Tubular "A" are making 1909 better yet. Write for catalog No. 290



Sharples Tubular Cream Separators run so easily that the medium sizes can be turned by one who is seated.



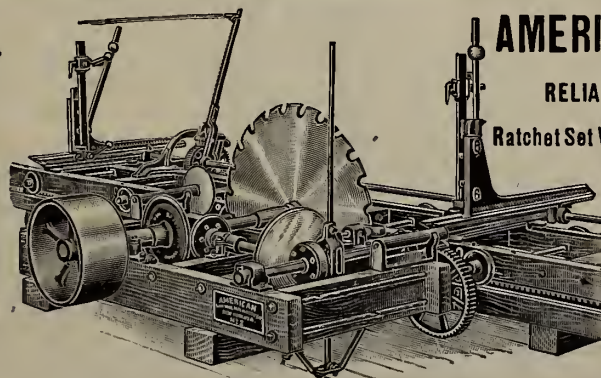
Tubular supply cans are low, steady, and need not be removed to take the machine apart. A plumb bob is attached to the back of our 1909 Tubular "A" for quickly leveling the machine.

The Sharples Separator Co.

Toronto, Can. West Chester, Penna. Portland, Ore.
Winnipeg, Can. Chicago, Ill. San Francisco, Cal.

ing and her period of full maturity when she will fail to show any increase over the first test. We have had cows to do this at the second calving; others to make the failure at the third calving, and still others at a later period. This is illustrated by the record of Jacoba Irene, the celebrated Jersey cow. In her first year she made 16,522 pounds of milk and 324 pounds of butter fat. In her second year she made 11,392 pounds of milk and 620 pounds of fat. In her third year she made 12,388 pounds of milk and 674 pounds of fat. In her fourth year she made 16,000 pounds of milk and 835 pounds of fat.

2. As to the point of a cow making a higher or less percentage of butter fat in the earlier or later periods of her lactation, it was formerly thought and records seemed to justify the position that the percentage of fat was higher in the earlier period of lactation than in the later, and this was our own experience without the use of a separator, but it seems now to be fully established that there is little if any change in the percentage of fat at any period of the lactation, when the fat is completely separated by means of the separator. In the earlier tests made neither the Bab-



AMERICAN SAW MILLS

RELIABLE FRICTION FEED

Ratchet Set Works, Quick Receder, Duple

Steel Dogs. Strong, ACCURATE AND RELIABLE

Best material and workmanship, light running; requires little power; simple, easy to handle; won't get out of order.

BELT FEED MILLS in all sizes.

Log Beam Carriages can be furnished with any of our mills. No. 1. Warranted to cut 2,000 feet per day with 6 H. P. engine. Seven other sizes made. Also Edgers, Trimmers, Shingle Machines, Lath Mills, Rip and Cut-Off Saws, Drag Saws, Cordwood Saws and Feed Mills. Catalogue sent free.

"Rowe, Mass., October 24, 1905.—I have a No. 1 American Saw Mill and send you an order for another just like it. I run it with my 8 H. P. portable gasoline engine; have sawed 5,000 feet of lumber in ten hours with it without any trouble. I use a 48-inch saw.

Yours truly,

BRADLEY C. NEWELL."

AMERICAN SAW MILL MACHINERY CO., 137 Hope St., Hackettstown, N. J.
OUR AGENTS.—Watt Plow Company, Richmond, Va.; R. P. Johnson, Wytheville, Va.; Hyman Supply Company, New Berne and Wilmington, N. C.; Gibbs Machinery Company, Columbia, S. C.

Orange Co., Va., March 13, '09.
Permit me to express my highest appreciation of the Southern Planter

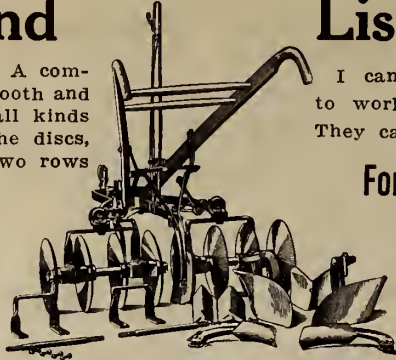
as the most practical, common sense publication of its kind issued.

B. F. SELBY.

Stop, Look and

Here comes the best one yet made. A combination of the Horse Hoe, the Plain Tooth and Reversible Disc Cultivators, used for all kinds of cultivation and will, when using the discs, work out the whole middle between two rows of any width from 2½ to 4 feet wide, every trip, and from 4 to 5½ feet every two trips, either working the dirt to or from the plants at any depth desired down to 5 inches. Can also be used for a light harrow and

One Small Horse Pulls It Easily.



Listen FARMERS!

I can furnish the patented discs attachments to work on any ordinary 5-tooth cultivator. They carry either 6 or 8 discs at a time.

For Information or Prices Write

Frank Beasley,

1422 East Main Street.

RICHMOND, VA.

cock nor the separator was in use and the only way to extract the fat was by cooling the milk with water and ice. Under that system there never was a complete extraction of the fat. In the earlier periods of the lactation it was easier to get the fat separated from the milk whilst in the later periods a good deal of it was lost through failure to get the fat globules to separate. It may be accepted as a settled question that you cannot by any system of feeding feed fat into the milk nor can you change appreciably the average percentage of fat which the breeding and temperament of the cow seems to fix at the outset of her lactation. And yet, with all this, we have known considerable changes to occur even from day to day in the amount of fat in the milk. We have known many a cow to vary as much as one or even two per cent. from day to day, whilst upon the same feed and under the same conditions so far as controlled by the feeder. Jacoba Irene made only 324 pounds of fat from 16,522 pounds of milk in her first year. In her second year she made 620 pounds of fat from only 11,392 pounds of milk. That is to say she made in her second year 296 pounds more fat from 5,130 pounds less milk.—Ed.

Warts on Teat.

I have a heifer afflicted with large, ugly warts one of which surrounds one teat so that it cannot be cut off without injury to the teat. She is expected to drop her calf in August.

Will you kindly advise me what to do, or tell me where I can get the advice? I would write to Dr. Ferneyhough if I could get his address.

C. W. VENABLE.

Pittsylvania Co., Va.

The only way to remove the warts when they cannot be cut off is to burn them off gradually with caustic potash or lunar caustic, being careful not to continue the applications longer than just sufficient to remove the warty growths. Dr. Ferneyhough's address is Burkeville, Va.

THE IMPERIAL DOUBLE DISC HARRROW

WITH FORE TRUCK.

A Combination Of Out-Throw and In-Throw Disc Harrows in a Single Machine.



The Imperial Double Disc is a double machine with double capacity. It is handled by one man with three or four horses, doing the work of two men and six horses when using ordinary Disc Harrows. The soil is harrowed twice in one passage over the field, being cut and worked outward by the forward discs and then cut and thrown back by the rear discs. The surface of the ground is left smooth and level. This double harrowing is exactly equal to two workings of the field with a single machine. The saving in time is just one-half and in expense nearly as much. The quality of the work is better because the second harrowing follows immediately while the ground is mellow and because it leaves an even, level surface.

The rear gang frame is hooked to the main frame, forming a flexible connection that aids greatly in turning corners and follows the front gangs as the rear wheels of a wagon follow the front wheels. The ground is not thrown up in ridges when turning, as is apt to be the case with a rigid frame, but is as evenly and smoothly harrowed as in other parts of the field.

An important feature of this machine is in the quick and easy change that may be made into a single Harrow by detaching the rear gangs. This is done in a moment's time by removing a spring cotter and lifting the end of the rear frame bar where it hooks into the main frame. Having detached the rear gangs, the operator has a regular two gang Cut Out Disc Harrow complete in every particular and ready for work.

See for our complete Catalogue, which gives prices of different styles of harrows, and our full line of up-to-date Farm Machinery.

THE IMPLEMENT COMPANY.

No 1302 East Main St..

RICHMOND, VA.

Sowing Grass With Cowpeas.

Some writer has advised in The Planter that grass seed be sown with cowpeas. Now, one of my neighbors sowed red clover with peas, clover came up nicely, but when the peas were cut all the clover had disappeared. He thinks a heavy growth of peas will smother out clover. So please state in May Planter what kind of grass was sown, if you know, and what you think of the chance for grass when sown with peas.

W. N. TIFFANY.

Fauquier Co., Va.

There is always a risk or the clover and grass being smothered when sown with cowpeas and we have always advised that when this course is followed a light seeding of cowpeas should be made. We have a number of subscribers who sow grass of all kinds with peas and generally succeed in securing a stand, but they are careful not to get the cowpeas too thick on the land. Much depends on the weather. If the summer and early fall is a wet one, the peas are almost certain to get down and smother the grass, but if there be not

HENRY FAIRFAX,
President.

ALFRED B. WILLIAMS,
1st Vice President.

M. A. CHAMBERS,
Secretary.

1909 VIRGINIA STATE FAIR 1909

RICHMOND

OCTOBER 4-5-6-7-8-9.

In keeping with the object of the Virginia State Fair Association, the development of the interests of the FARMERS OF VIRGINIA—attention is again directed in this, the second announcement of the 1909 VIRGINIA STATE FAIR, to the following PARTIAL classification of the

FARM PRODUCTS DEPARTMENT (Watch for Additions).

Field Seed, Grain.

CORN.

	1st.	2d.	3d.
Ten ears, White Corn.....	\$5.00	\$2.00	\$1.00
Ten ears, Yellow Corn.....	5.00	2.00	1.00
Ear of White Corn.....	2.50	1.00	.50
Ear of Yellow Corn.....	2.50	1.00	.50
Ten ears Pop Corn.....	2.50	1.00	.50
Ten ears Sweet Corn.....	3.00	1.50	1.00
Display of Varieties Corn on Stalk	3.00	1.50	1.00
Largest total yield of Corn from			
10 stalks, to be shown on stalk	5.00	2.50	1.00
Twenty ears Corn, any variety....	5.00	2.00	1.00

WHEAT.

Quarter bu. Longberry	4.00	2.00	1.00
Quarter bu. Fultz.....	4.00	2.00	1.00
Display of Wheat in sheaf.. ...	4.00	2.00	1.00

OATS.

Quarter bu. White Oats.....	3.00	1.50	.50
Quarter bu. Black Oats.....	3.00	1.50	.50
Quarter bu. Mixed Oats.....	3.00	1.50	.50
Display of Oats in sheaf.....	3.00	1.50	.50
Quarter bu. Barley.....	3.00	1.50	.50
Display Barley in sheaf	3.00	1.50	.50
Quarter bu. Rye	3.00	1.50	.50
Display Rye in Sheaf.....	3.00	1.50	.50

GRASSES.

Display Alfalfa Hay, bale or bundle to weigh at least 20 lbs....	\$3.50	\$2.00	\$1.00
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	1st.	2d.	3d.
Display Orchard Grass, bale or bundle to weigh at least 20 lbs.....	2.50	2.00	1.00
Display Red Clover, bale or bundle to weigh at least 20 lbs.....	5.50	2.00	1.00
Display Crimson Clover, bale or bundle to weigh at least 20 lbs.....	3.50	2.00	1.00
Display Alsike Clover, bale or bundle to weigh at least 20 lbs.....	3.50	2.00	1.00
Display of varieties of Clover plants	3.50	2.00	1.00
Display of collection of Alfalfa plants, not less than 6 stools..	3.50	2.00	1.00
Display Soy Beans on Vine.....	3.00	1.50	.75
Display Cow Peas	3.00	1.50	.75
Display varieties Sorghum on stalk	3.50	2.00	1.00
Display German Millet in bundle	3.00	1.50	.75
Display Hungarian Millet in bundle	3.00	1.50	1.00
Most complete display of varieties of whole plants, including Wheat, Corn, Clovers and Grasses	15.00	5.00	2.50

SWEEPSTAKES.

Best ¼ bu. Wheat, any variety..	5.00	Rib.	
Best 10 ears Corn, any variety..	5.00	Rib.	
Display of Grain, Grasses and Forage Crops, in grain and stalk, 25 samples must be shown....	25.00	10.00	Rib.

COUNTY EXHIBITS.

Large and attractive CASH prizes will be offered in the County Exhibits classes, and will prove of interest to all growers.

ACRE YIELDS.

The prizes to be offered in these classes will be adequate and of value, and will bring handsome returns to all competitors.

TOBACCO.

In addition to the regular prizes of the Fair for Sun Cured, Olive Stemming, Brown Shipping and Stemming, and the Bright Crop Wrappers, Cutters, Fillers and Smokers, THE RICHMOND TOBACCO TRADE offers cash Sweepstakes amounting to Seventy-Five Dollars for best exhibits any type shown by Grower; and Special Prizes, AGGREGATING HUNDREDS OF DOLLARS will be offered by the Tobacconists of the State for exhibits of the Virginia Burley Crop, the production of which they deem important.

THE CORN SPECIALS.

These Specials, the conditions and classes for which will soon be announced, will approximate, if not exceed ONE THOUSAND DOLLARS and will prove of utmost interest and value to every Farmer of the State.

WATCH FOR OTHER SPECIALS.

The Public Spirit of many enterprises and citizens is aroused, and other SPECIALS, totalling SEVERAL HUNDRED DOLLARS will be shortly made public. Read the SOUTHERN PLANTER FOR JUNE for further details, and also for full particulars of the VEGETABLE DEPARTMENT.

THE FAIR is here to stay, "the first week in October;" HELP to make last year's unqualified success small in comparison with the

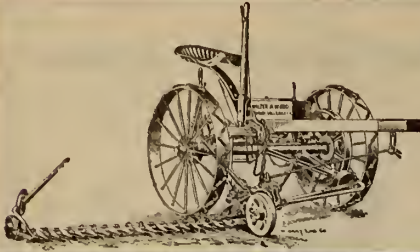
1909

VIRGINIA STATE FAIR

1909

All questions promptly answered; write for folder of FARM PRODUCTS DEPARTMENT.

Address: MARK R. LLOYD, General Manager, RICHMOND, VA.



MOWING MACHINES DELIVERED AT YOUR DEPOT

Just spend one cent in money and one minute of time and ask the House of ASHTON STARKE, Richmond, Va., what they will deliver the Highest Grade Field Mower at your depot for.

too much rain they will stand up and give the grass only sufficient shading to ensure its growth.—Ed.

Liability of County for Death of Horse

A subscriber writes us that he had a wagon and team of valuable horses to fall through a county bridge, and, as a consequence, two of the horses were killed and the other two injured. He made a claim on the county for compensation and this was refused and he then took the care before the Circuit Judge, and he said it could not be tried before a jury. As a result, he has lost two horses and has two injured ones, and can get no compensation. He wants to know if this is law or justice. It seems to us that it is neither law nor justice. We are not sufficiently informed on the law on this subject to say positively that we are right in our view, but one thing seems to us clear—that the county authorities are invested with the care of the roads and bridges and have imposed on them a duty to keep both in such a condition that they can be safely used by the citizens and are authorized to levy taxes for this purpose. Having such a duty and such authority, it would seem to follow that if they fail in their duty and, by keeping open an unsafe bridge, invite travellers to pass over it and an accident results, they are liable for the consequences of their neglect. If they fail to recognize a claim for this an appeal lies to the court for their decision. We should like to head what some of our legal friends who are farmers as well as lawyers have to say on this case.—Ed.

Salt—Wood Ashes—Hen Manure.

1. Please let me know the best use to which to put salt that has been used for salting pork.
2. What crop is most benefitted by wood ashes, and how much should be applied to the acre?
3. Please give me full directions for making a first-class fertilizer, using hen manure as the base.
4. I see that nearly all writers in the agricultural papers recommend shallow cultivation for corn. What is the greatest depth that would come under that head and what implement is best for such cultivation? One of

SPECIAL SALE OF

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FARM IMPLEMENTS, WAGONS, BUGGIES, ETC.,

AT REDUCED PRICES

The entire stock will be sold to close out business, and parties desiring to purchase goods in these lines can procure them at special low prices.

Act quickly, before the assortment is broken. Printed lists with prices mailed to out-of-town buyers on request.

H. W. ELLETT, SALES AGENT.

STORE 1406 E. MAIN STREET,
RICHMOND, VIRGINIA.

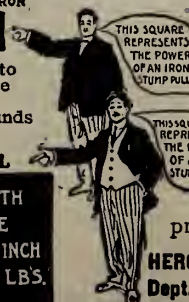
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CAST IRON

Strength to the square inch 16,000 pounds

STEEL

STRENGTH TO THE SQUARE INCH 120,000 LBS.



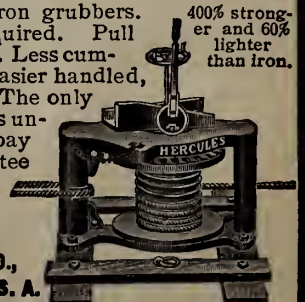
THIS SQUARE REPRESENTS THE POWER OF AN IRON STUMP PULLER

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do the work of three iron grubbers. No staking down required. Pull trees as well as stumps. Less cumbersome than iron, easier handled, price almost as low. The only steel grubber and it's unbreakable. We pay freight and guarantee for three years.

Write for catalog and price list.

HERCULES MANUFACTURING CO.,
Dept. 116 Centerville, Iowa, U. S. A.



400% stronger and 60% lighter than iron.

the most successful corn growers in my neighborhood cultivates his crop exclusively with the double shovel plow but nearly all others use the double cultivator and triple plow or side wipe as some call it. What implement would you advise for best results?

5. I have a field for corn this year wick I wish to improve. It is my intention to sow it down in crimson clover at last working. Should the clover be sown before or after the cultivator, and how is the best way to sow it? I have never sown any. And for best results, should anything else be sown with the clover? I want to sow peas on same field next spring. Madison Co., Va. BRIGHTWOOD.

1. Salt is of no value as a fertilizer to any crop except it may be as a light dressing on an asparagus bed in the spring. Perhaps the best use to make of it would be to apply it on roads and walks to kill grass and weeds.

2. Wood ashes are valuable for the potash and lime contained in them, and may be used with advantage on every kind of crop. Possibly the best use to make of the small quantity usually available is to apply them in the garden or orchard.

3 You will find advice as to using hen manure in a fertilizer in reply to other queries in this issue.

4. Shallow cultivation means not more than two or, at the outside, three inches deep. The tooth cultivators like the well-known Iron Age cultivators are the best.

5. Sow the crimson clover just before the last cultivation and then cultivator will cover it. Either sow it broadcast by hand or with the Cahoon sower. Sow it alone.—Ed.

Apple Growing in Virginia.

Let me know through your paper what are the best counties for apples in Virginia. I want to buy a summer home and, if possible, want to combine apples, blue grass and limestone soil. PAUL CLARK.

Coahoma Co., Miss.

All the counties in the Piedmont and Valley sections of the State are especially adapted to fruit growing and combine limestone and blue grass. Albemarle, Nelson, Bedford and Augusta are all celebrated for apples and in Southwest Virginia, Roanoke and Patrick are good locations. As a residential section, Albemarle is especially good, as the location of the University of Virginia there and the facilities for reaching Washington and the North have induced the inflow of a large number of most desirable people, and its fruit interests are large.—Ed.

Lame Mare.

I have a mare twelve years old that has been kicked on right knee, which

DE LAVAL SEPARATORS MAKE THE BEST BUTTER

The one purpose of every thinking buyer of a cream separator is the making of the most and the best cream possible, whether for home butter-making, creamery patronage, or any other use to which cream is put.

It is possible to "claim" almost everything for the various makes of cream separators, but the one indisputable fact that would-be competitors do not even attempt to get around is the unquestionable superiority of the DE LAVAL machines in the making of the best butter.

Year after year, dating back to the invention of the "ALPHA-DISC" system of DE LAVAL bowl construction, butter made by users of DE LAVAL machines has scored highest and won all higher awards in every large and thoroughly representative butter contest throughout the world.

Beginning with the first great annual contest of the NATIONAL BUTTERMAKERS ASSOCIATION in 1892 and ending with the 1908 contest, not only the HIGHEST but every anywhere near high award has been made to users of DE LAVAL separators and more than nine-tenths of all exhibits scoring above 90 per cent. in quality have been DE LAVAL made.

**THE ROLL OF HONOR
ALL DE LAVAL USERS.**

The First Prize Winners and their scores at every convention of the National Buttermakers Association since its organization in 1892 have been as follows:

1892	Madison, Wis., Louis Brahe, Washington, Iowa.....	Score 98.
1893	Dubuque, Iowa, C. W. Smith, Colvin's Park, Ill....	Score 97
1895	Rockford, Ill., F. C. Oltrogge, Tripoli, Iowa.....	Score 98
1896	Cedar Rapids, Iowa, Thomas Milton, St. Paul, Minn....	Score 97.82
1897	Owatonna, Minn., H. N. Miller, Randall, Iowa.....	Score 98.5
1898	Topeka, Kan., Samuel Haughdahl, New Sweden, Minn.	Score 98
1899	Sioux Falls, South Dakota, A. W. McCall, Creston, Ia.	Score 97
1900	Lincoln, Neb., H. T. Sondergaard, Litchfield, Minn....	Score 98
1901	St. Paul, Minn., E. O. Quenvold, Owatonna, Minn.....	Score 97
1902	E. L. Duxbury, Green Bay Wis.,	Score 98.5
1904	St. Louis Mo., L. S. Taylor, Glenville, Minn.....	Score 98.5
1906	Chicago, Ill., A. Carlson, Rush City, Minn.....	Score 97
1907	Chicago, Ill., A. Lindblad, North Branch, Minn.....	Score 97.5
1908	J. C. Post, Hector, Minn.	Score 98

(There were no conventions in 1894, 1903 and 1905.)

In the great 1908 contest 504 of the best buttermakers in the United States competed, with first, second, and third, and all important awards, being made to users of DE LAVAL machines.

At each of the big Chicago National Dairy Shows DE LAVAL butter has made a CLEAN SWEEP of all highest prizes, and at the December 1908 Show, when instead of butter there was a cream contest, under the supervision of the Dairy Division of the United States Department of Agriculture at Washington, first and second prizes in both classes were won by DE LAVAL cream.

Going back further, DE LAVAL made butter received the GRAND PRIZE at the ST. LOUIS WORLD'S FAIR as well as at the last PARIS WORLD'S EXPOSITION.

In all the hundreds of important state and country contests the world over for twenty years the superiority of the DE LAVAL separator in the making of fine butter has been conclusively proven.

THE EXPLANATION IS TO BE FOUND IN THE IDEAL DESIGN AND CONSTRUCTION OF THE DE LAVAL SEPARATING BOWLS AND THE THOROUGHLY PRACTICAL CONDITIONS UNDER WHICH DE LAVAL MACHINES MAY BE OPERATED AND USED.

A new 1909 DE LAVAL catalogue—affording an education in this as in other features of separator knowledge—is to be had for the asking.

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42 E. Madison St. CHICAGO.	General Offices:	173-177 William Street, MONTREAL
1213 & 1215 Filbert St., PHILADELPHIA.	165 BROADWAY,	14 & 16 Princess Street, WINNIPEG.
Drumm and Sacramento Streets, SAN FRANCISCO	NEW YORK.	107 First Street, PORTLAND, OREG.

is a little stiff; also, a small, hard knot has formed on inside of knee (a little in front). She limps when pulling a load or travelling on hard rocks. Please tell me what to do for her; also, will she ever get over it? Hamblen Co., Tenn. E. C. WHITE.

Try rubbing the leg with Absorbine, which you will find advertised in The Planter. In a mare as old as yours it is doubtful whether she ever gets completely over the injury, but it may be so improved by the rubbing that it will not practically interfere with her usefulness.—Ed.

Fruit Trees to Plant.

I have bought a farm in Virginia and expect to move South by the end of the year. I wish to start a young orchard when I come of apple, pear, cherry and other fruit trees. Will trees do that are shipped down from

Pennsylvania, or would it be better to buy Southern trees?

A NEW SUBSCRIBER.
Allegheny Co., Pa.

You had better buy your fruit trees from nurserymen in the section of the State where you are going to plant them. They will then be acclimated and likely to do better, and you will be able to get varieties which are suited to the soil and climate of the locality.—Ed.

Sowing Cowpeas in Corn.

I want to ask your advice as to the sowing of cowpeas at the laying by of corn preparatory to seeding of wheat this fall. I have a thirty-acre field, most level, but no water stands on it. A part of the field is rather close clay land, rather inclined to bake. I think of trying peas. What

kind of fertilizer should I use, if any? Loudoun Co., Va. C. W. GREEAR.

The seed of cowpeas in corn at the last working is a practice much to be commended, as it results in great improvement of the land. Where the peas are sown broadcast, three pecks or a bushel to the acre is usually sown, but if put in with a drill running between the corn rows, two pecks will be sufficient. The best practice is to sow a mixture of two or three varieties as they make a heavier crop than a single variety. Mix Black, Clay and Whip-poor-will. If the land is well and deeply prepared for the corn crop and if not rich, 200 or 300 pounds of acid phosphate is applied previous to planting the corn, no further fertilization is needed for the peas. but if this has not been done then a better crop will be made if 200 or 300 pounds of acid phosphate

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IT CAN.**

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Samples, etc., upon request.
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STONERIDGE AND SHETLAND STOCK FARMS

Wealth, 29579, record 2.10; brown horse, 16 hands, by Gambetta Wilkes, 2:19 1/4, dam Magnolia, by Norfolk. Fastest harness stallion in Virginia. Blue ribbon winner. \$25 insurance.

Emperor Wilkes, a grand type of the trotting-bred coach stallion. \$15 Insurance.

Stoneridge Jack, blue ribbon winner at the Virginia State Fairs, 1906, 1907 1908. \$10 insurance.

IRVING J. COFFIN,
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Richmond, Va.

J. W. PARRISH, 45338.

Bay horse, 16 hands; weight 1,200 pounds, foaled 1902. Sired by Dumbarton, 33,799, dam Maud Elliver, by Conductor, 12,256. A trotting-bred stallion, with speed and good manners. Terms—\$8 single leap; \$15 season; \$25 insurance.

JOSEPH BAKER,
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BLUE AND GRAY.

Chestnut horse, by Hindoo, dam Red and Blue, by Alarm, second dam Maggie B. B., dam of Iroquois, winner of the English Derby. An impressive thoroughbred sire.
Fee, \$10 season.

MANN S. VALENTINE,
Stokes, Goochland Co., Va.

JUDGE PALMER, 2:26 1-4

(Formerly Dan Patch, Jr.)

Bay horse, foaled 1904, by Busaro, 2:29 1/4, dam Rose Wilkes, by Windom, 9892, son of Red Wilkes.

Judge Palmer is a trotter by inheritance and a race horse as well.

Fee, \$25 season.

A. A. SLAGLE, Petersburg, Va.

1909 PETAURIST, 42431. 1909

Bay horse, by Peter the Great, 2:07 1/4; dam Telka, by Arlon, 2:07 1/4; second dam L. Jollo, by Advertiser, 2:15 1/4. Bred in the purple and a blue ribbon winner.

\$25 season with return privilege.

JOSEPH LASITTER,
Southern Stock Yards, Richmond, Va.

Stallion cards, folders and catalogues compiled; pedigrees of trotters and thoroughbred horses traced. My library includes Year Books, Trotting Registers, Stud Books, Files of Turf Journals and other references. Special attention to registration of horses.

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1909. Warren Park Stud. 1909. MONTEREY.

Bay horse, 16 1/2 hands, 1,250 pounds, foaled 1903, by Montana, dam Martenette, by Silver Bow. Monterey has grand size and was a good race horse. He was second in the \$10,000 Crescent City Derby.

J. GIBSON KEMPER,
Clifton Station, Va.

JACK COOK, 2504

Gray horse, trial 2:26 1/4, trotting, by General Wilkes, 2:21 1/4, dam Irene Fell, dam of Johnny Agan, 2:05 1/4, etc., by Mambrino Abdallah, 2201. Jack Cook has sired Capt. Cook, 2:20 1/4, and other winners. His get have fine size and good looks.

For terms address
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Trotter, bay horse, 16 1/2 hand, weight 1250 pounds, foaled 1904, by Russell Rex, 16728, dam Penelope Whitley, by Carlos, 6750. A grand type of the trotting bred coach stallion, with beauty of form and high finish.

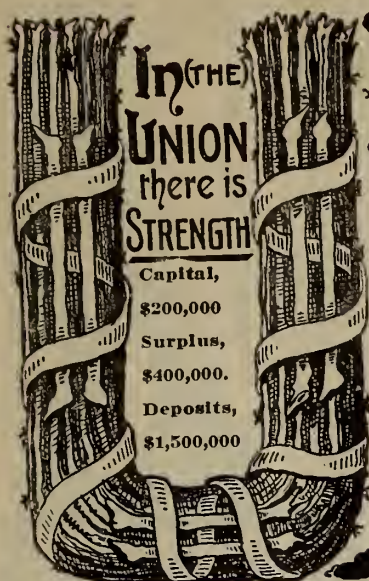
Terms \$10 single leap; \$20 season; \$25 insurance.

S. A. WHITLEY, Smithfield, Va.

PRESQUE ISLE, 26288, Record 2:29 1/4

Trotter, bay horse, 16 hands, weight 1200 pounds, sired by Norfolk, 3670, dam Mambrino, by Mambrino King, 1279. He has sired many fine saddle and harness horses, with style, action and finish. For terms address

MICHAEL & VAN LEAR,
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UNION BANK

Extravagance Leads to Poverty.

Place the money that you have been wasting in a good strong bank, where you feel certain that it is safe, and where interest is paid from the time the first deposit is made. Your money will rapidly accumulate, and you will soon have to your credit what you have previously been idly throwing away. Write for our method of "Banking by Mail."

The Oldest, Strongest and Safest Savings Bank in the South
Pays 3 Per Cent. Interest, Compounded twice a year.

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is worked into the land at the last working and the peas be then planted. We do not advise that this pea crop be plowed down before seeding the wheat, as this makes the land too light and puffy for the best success of the wheat, but cut the pea crop into the land with the disc harrow and sow the wheat without further plowing. Land that has been properly prepared for corn and the crop cultivated as it ought to be is in the best condition for making a wheat crop without replowing when the pea vines are just cut into the surface soil with a disc. —Ed.

Replanting Corn.

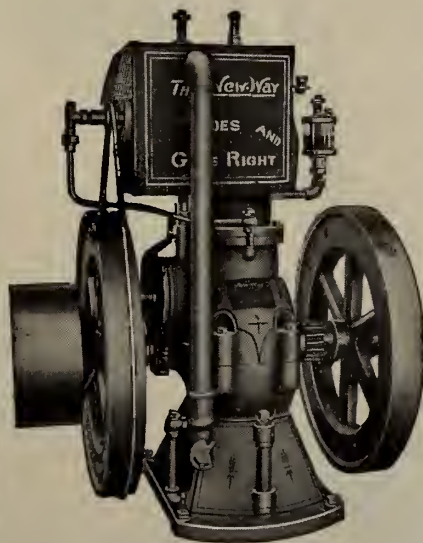
Professor Massey says it is time lost to replant corn. If we did not replant our corn in this section of the country we would have no stand on some land on account of the worms. If there is any way to prevent their ravages, please let us know it.

J. W. LOCKHART.

Fauquier Co., Va.

The partial replanting of a crop of corn is no doubt as Professor Massey says—largely lost time as the silking of the later replanted corn comes too late to be fertilized by the pollen of the earlier planted crop. The replanted corn largely makes only fodder or partially filled ears from this cause. The way to obviate dam-

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Have you heard of the **NEWEST** and **MOST UP-TO-DATE GASOLINE ENGINE** on the **MARKET?** If not, write us about it at once. It's called the "**NEW-WAY**" air cooled and made in $2\frac{1}{2}$, $3\frac{1}{2}$ and 7 H. P.—Prices guaranteed to be cheapest of any high class engine. It can be used for every **FARM** purpose imaginable, and is so simple that anyone can run it.

STOCKDELL-MYERS H'D'W. CO.
Petersburg, Va.

age from the worms is to plow early and work thoroughly before planting. In this way the worms are exposed to the weather and killed, or eaten by the birds. Where land is badly infested with worms they may be destroyed by dropping bunches of clover dipped in Paris green mixed in water,

or cabbage leaves dipped in the same way at frequent intervals over the field before the corn is planted or before it germinates. The worms will eat these and be poisoned. Where a stand of corn is badly cut down by the worms or any other cause, it is better to work the land over again and

replant the whole crop rather than to partially replant. Much better results will be obtained in this way.—Ed.

Hog Husbandry.

I am getting fixed up to go into the hog business again, and would like to ask, will the large Yorkshire hogs make about the same pounds of meat with the same amount of feed as the Chester Whites or Berkshires will? Also, can you tell me if the Government has issued any bulletin on experiments made with the different breeds? GEO. A. GREENE.

Nansemond Co., Va.

The large white Yorkshire hogs are bacon hogs even more strictly than the Berkshires or Chester Whites. They will make as good gains from their feed as the other breeds named, but the meat will be leaner. The Department of Agriculture has issued bulletins on Hog Husbandry, but we do not recall that it has issued any bulletin giving particulars of experiments made comparing the feeding qualities of the different breeds. Several of the Experiment Stations have made comparison tests of different breeds; amongst these are Wisconsin, Kansas, Massachusetts and Illinois. The Directors of these Stations will no doubt send copies of the bulletins if they have them, although they are not required to do so to parties outside their respective States. The

new book on "Swine in America," by F. D. Coburn, gives the fullest information on this subject. We can supply this book; price \$2.50.—Ed.

CONCRETE CONSTRUCTION

Our advertising patrons, the Atlas Portland Cement Co., New York City, issue a very attractive illustrated book of some 125 pages entitled, Concrete Construction About the Home and on the Farm. This book thoroughly illustrates and describes almost all imaginable uses to which concrete can be put. It also gives specifications for mixing and handling cement and also for circular forms, sidewalks, curbs, floors, steps, walls, chimneys, fence posts, hog pens, box stalls, silos, and culverts, with splendid illustrations of each. In addition to its everlasting qualities, the beauty of handling it is that you do not have to employ expert workmen to mix and use it. This valuable book may be had free for the asking by addressing Department 116 at the above address.

CATALOGUES.

Everything for the Lawn. This is the title of a beautifully gotten up catalogue of Peter Henderson & Co., Seedsmen, New York City, giving complete information about everything for the lawn and instructions for lawn formations and care.

Leggett's Spray Calendar. This is the title of a very comprehensive cir-

cular issued by Leggett & Brother, New York City, giving complete spraying instructions for dry and liquid sprays and also brief description of their Champion Dusters.

Running Water. The Rife Engine Co. gives this title to its neatly gotten up catalogue illustrating and describing its well-known Hydraulic Ram. It shows how easily and cheaply you can get water when and where you want it.

Optimism and Progress, an address delivered by Mr. Henry W. Wood, First Vice-President of the Chamber of Commerce, Richmond, Virginia, and circulated in neat pamphlet form by the Secretary of the Chamber.

The Philadelphia Silo. The catalogue of E. F. Schlichter & Co., illustrating and describing the above mentioned opening roof silo, is a very neat and attractive affair, and will be sent free to all applicants.

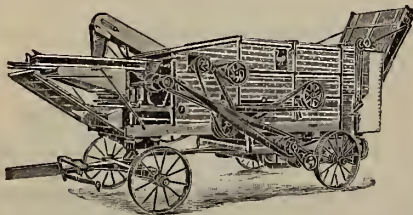
Pittsylvania Co., Va., March 17, '09.

The Southern Planter is worth more to me than all the other papers I take and I do not want to miss a single number. S. D. WALKER.

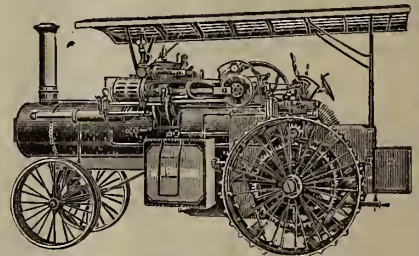
Orange Co., Va., March 10, '09.

Please renew my subscription to your valuable journal. I like the Southern Planter best of all the farm papers I take. HUGH BROOKING.

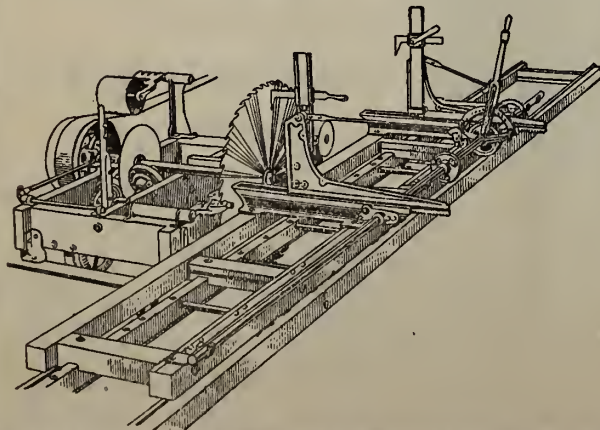
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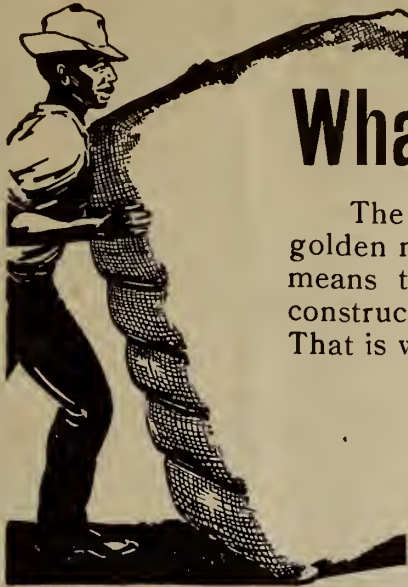


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W. K. Bache, Salesman,
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What the Munger System Means

The "Munger System" means the saving to the ginner of every golden moment during the 90 days of the cotton-ginning season. It means the greatest turn-out at least cost. It means heavy, durable construction, no "freak features" or liability to break down and repairs. That is why through all the South the **Munger** is known as

THE PERFECT SYSTEM

Among growers the **Munger** has earned the reputation of giving better samples and more profit; of frequently improving sample sufficiently to cover cost of ginning. Think how this prestige draws trade!

Munger System Gin Outfits give choice of Munger, Pratt, Winship, Smith and

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Plans and estimates free.

Catalogue on application.

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Charlotte, N. C.

Birmingham, Ala.
Bridgewater, Mass.

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(For export.)

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Pennsylvania Experiment Station, State College, Pa. Bull. 90. Soil Fertility.
South Carolina Experiment Station, Clemson College, S. C. Bull. 141. Treatment of Plant Diseases and Injurious Insects in South Carolina.
South Dakota Experiment Station, Brookings, South Dakota. Bull.

110. Progress in Variety Tests of Oats.
Tennessee Experiment Station, Knoxville, Tenn. Bull. 81. Tick Eradication.
Virginia Weather Service, Richmond, Va. Report for February, 1909.
Virginia Department of Health, Richmond, Va. Vol. I, No. 8. School Hygiene Number.
West Virginia State Board of Agriculture, Charleston, W. Va. Report for Quarter Ending December, 1908.
Wyoming Experiment Station, Laramie, Wyoming, 18th Annual Report.

Prince Geo. Co., Md., Feb. 22 '09.

I value the Southern Planter very highly and feel that I could not do without it and think if Roosevelt really wants to "uplift the farmers" he could not do better than send the Southern Planter to each one.

R. H. COCKERILLE.

Columbiana Co., O., March 10, '09.
The Southern Planter is the best agricultural paper that money can buy.
G. C. HUMES.

BOOKS AND PAMPHLETS.

Trip of a College on Wheels. Virginia Polytechnic Institute and Norfolk and Western Railway Better Farming Special. This is an interesting account of the recent trip over the Norfolk & Western Railway of agricultural specialists from the Agricultural College and Experiment Station from Southwestern Virginia to Tidewater. It is issued by the Norfolk & Western Railway Company's Agricultural and Industrial Department, Roanoke.

Armour's Farmers Almanac, 1909. A useful and interesting almanac.

The State Normal and Industrial School, Harrisonburg, Va. Prospectus. Send for a copy of this and see the advantages which are offered to students by this new school, which was provided for by the last session of the State Legislature, and will be ready for work in the fall of this year.

The Banking and Currency Problem in the United States, by Victor Moranebz. Published by the North American Review Publishing Co., Franklin Square, New York.

The Life and Times of Anne Royall, by Sarah Harvey Porter, published by the Torch Press, Cedar Rapid, Iowa. This gives an account of almost the earliest woman journalist of America.

The Tariff and the Farmer, by S.

Payson Perry. How it lessens the exchange value of his products. How it subjects him to most unfair trade conditions. The result. Four decades of declining agricultural prosperity. Published by S. F. Blanchard & Co., Worcester, Mass.

THE WILLIAMSON FARMS.

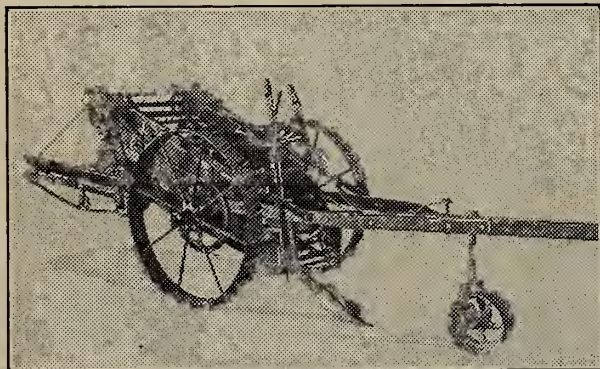
The Williamson Farms, Mattoax, Va., have been among the heaviest of our new poultry advertisers this spring. The proprietor of the farm advised us recently that they are going very extensively into Rose Comb Rhode Island Reds as they are thoroughly convinced that this breed is the best all round utility fowl of the numerous breeds offered the public to-day. Their breeding pens are all headed by noted prize winners, some of which were bought at long prices. They have about 2,000 chicks hatched out already this spring and their offering of stock this fall should be a most attractive one.

By way of thoroughly preparing themselves to handle this large number of fowls they are building three or four new, up-to-date new poultry houses and in a short time will be able to care for orders of any magnitude. Look up their advertisement on another page.

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The American Peanut Harvester. Notice the plow is made separate and can be set to run deep or shallow while in motion.

NOTE.—If you intend to harvest peanuts with machinery, plant them in uniform rows not less than 2½ feet apart. Work well and lay by on a uniform ridge, taking care not to leave bumps in the middle of the row. Plant two or three rows parallel to fence or ditch for convenience in turning at the end of rows. Write at once.

American Peanut Harvester Corporation,

PETERSBURG, VA.

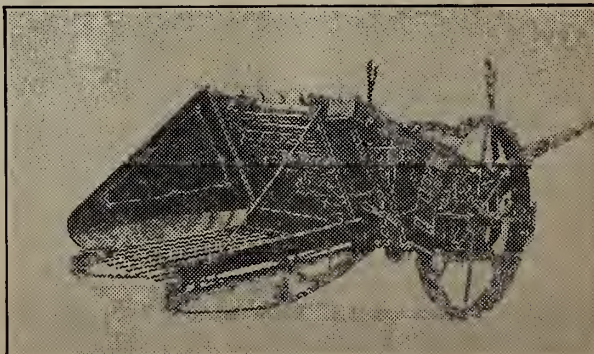
The American Peanut Harvester

The Machine that Does the Work of Seven Men

This machine is revolutionizing the method of harvesting peanuts. A boy using it can do the work of seven men and do it better. It digs, shakes and piles the peanuts with one operation. Recent improvements make it possible to harvest all varieties regardless of growth of vines.

We want live agents, and make special introductory price on first machine sold in each locality. We also make machines for planting and picking peanuts.

Write for prices and booklet full of valuable information about peanut growing. Sent FREE upon request.



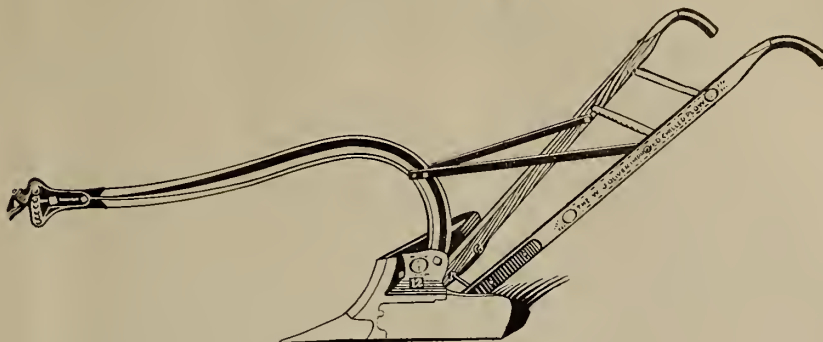
Another view. How the peanuts are piled.



THE PLOW FOR YOU



— IS —



THE Wm. J. OLIVER IMPROVED

BECAUSE

It is built with the USUAL troubles left out.

It has all of the good points, but none of the bad found in Chilled Plows of to-day.

IT

SHEDS PERFECTLY

AND

EACH PART IS PATENTED

For further particulars address the Manufacturers.

AGENTS WANTED

The Wm. J. Oliver Mfg. Co.

KNOXVILLE, TENNESSEE.



FIGHTING THE PESTS OF ORCHARD, FIELD AND GARDEN CROPS.

At this time of the year, the fruit grower, gardener and trucker are beginning to worry about possible damage to their crops by insect pests and diseases. These pests have greatly increased in recent years, keeping pace with the rapid development of the fruit and trucking industries. A conservative estimate is that Virginia fruit growers and truckers lose from eight to ten millions of dollars a year by the attacks of these enemies. But most of these injuries can be either completely prevented or greatly lessened by prompt measures; the most important of these is spraying. Spraying is not very difficult, or expensive, as many people suppose, and hundreds of Virginia fruit growers and truckers have demonstrated that it pays when properly done.

The State Agricultural Experiment Station, at Blacksburg, has just issued a timely circular on this subject. Descriptions, with many illustrations, are given of all the most common injurious insects and diseases of fruit, truck, tobacco, potatoes, field crops, house plants, and ornamentals, with advice on treatment, and a full discussion of spraying. Such common trouble as the borers, San Jose scale, codling moth, fire blight, striped cucumber beetle, rose spot, army worm, Hessian fly, grain smut, pota-

to blight, tobacco wire worm, plant lice, etc., are treated in detail. This circular may be secured free upon application to the State Agricultural Experiment Station, Blacksburg, Va.

JUST A PENNY FOR A POSTAL.

That is all it costs you to get a book of wonderful buggy and harness bargains—published by the Columbus Carriage & Harness Co. of Columbus, Ohio. This book makes you a good judge of buggy values and prices, and shows how you can save \$25.00 to \$40.00 cash on the cost of a buggy. It tells you how they sell buggies of every kind—direct to you at lowest rock-bottom factory prices—lower than most dealers can buy vehicles of even lower quality.

Most of our readers know the high quality of Columbus Vehicles—with twenty years' experience back of them—but the new low factory prices are pleasant surprises. So get your name in to the Columbus Carriage and Harness Co. and see which style you would like to try free for a full month. Compare your rig with anybody else's, and if you are not satisfied—return it and you are nothing out. We know that the above company is responsible and guarantees perfect satisfaction for two full years. Deal direct with them and save middleman's big profits. See for yourself how much you save—by comparing prices. But get their book—it

costs only one cent for a postal card—and it's worth anywhere from \$25.00 to \$40.00—the money it saves you.

Address Columbus Carriage & Harness Co., Station C-90, Columbus, O.

WHAT IS AXLE GREASE WORTH?

Who stops to think that axle grease cuts any figure in business economy, or that there is a difference between grease and grease—some being better, others worse? Yet it's a fact that the adhesive quality of an axle lubricant or its ability to wear, will raise or lower the expense account of a great city's commerce by a very considerable sum every year.

If you doubt it, stand for an hour on any busy corner and count the truck loads of merchandise moving toward railway terminals or steamship pier. Estimate, if you can, what it would mean to each shipper in time and team and truck wear if there was a little fraction less of friction required to move each load.

Think what an application of Mica Axle Grease to the four wheels of every dray and truck, large and small, would do toward hustling things. Why! It would mean dollars—good dollars and many dollars—to every merchant and manufacturer; because "Mica" is the greatest killer of friction on wagon axles ever known.

Any grease is better than no grease, but no grease is better than—or as good as—"Mica." Probably, if you

The Unit Road Machine

Over 600 In Successful Operation Between the Potomac and the Gulf

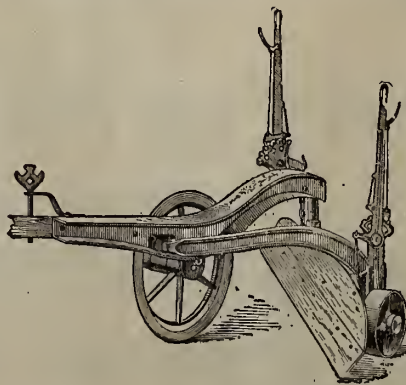
COSTS LESS THAN ONE-FIFTH
as much as the four-wheel machines.

ONLY ONE MAN AND ONE TEAM
required to operate.

DOES THE WORK OF 25 MEN,
using picks and shovels.

WORKS WHERE THE HEAVY
MACHINES ARE IMPRACTICABLE,
and does as efficient work.

HAS BEEN FULLY TESTED. IT
IS NO EXPERIMENT.



EXPENSE OF OPERATING BUT
A FRACTION of that of other
graders.

LARGE MACHINES LAID ASIDE
in favor of the

UNIT

Indicate the quality of work it is
capable of doing.

PAYS FOR ITSELF IN FEW
DAYS' WORK.

ROAD PLOWS, ROLLERS,
WHEEL AND DRAG SCRAPERS.

THE CALL-WATT CO., MANUFACTURERS,
13 South Fifteenth Street, **Richmond, Va.**

To reduce our stock of Disc Cultivators, Walking Cultivators, Double Row Corn Planters, Disc Harrows, Empire Grain Drills, Empire Lime, Plaster and Fertilizer Distributors, One- and Two-Horse Farm Wagons, we are offering Special Inducements as to Prices and Terms this month. Write at once if interested.

WILL YOUR HARVEST BRING FULL VALUE ?



It all depends on you—whether you make full value a possibility.

To prepare your soil—to plant good seed and plant it at the right time—to care for your fields while the grain is growing, all this is vital to farming success. You know it is vital and you use all your intelligence, all your ingenuity, all your energy to do things as they should be done.

How about the harvest?

That's when the reward comes. That's when you transform your season's thought and labor and watchfulness into gold.

Your harvest will bring you full value if you are prepared to harvest at the right time—just when the grain is ripe—and prepared with a machine that will get all the grain, whether standing, down or tangled, without delays, without breakdowns. A dependable machine in dependable condition is an absolute necessity.

In all walks of life we are guided best if guided by known truths.

It took years of expense, years of vexations and worries, for the farmers of the world to learn that they could always depend on the

Champion	McCormick	Osborne
Deering	Milwaukee	Plano

HARVESTING MACHINES.

- depend on them for an easy harvest
- for a quick harvest
- for a harvest with least labor
- least expense
- a full value harvest.

Need we suggest that you let this known truth guide you? You don't want to experiment. You want a machine you know will give you a full-value harvest—this year and next year and through years to come.

These six dependable harvesting machines are manufactured under conditions that insure superior quality in every machine. This accounts in a large measure for their world-wide popularity.

Buying a machine is not as simple a matter as it may seem—a number of things must be taken into consideration. You should know something about the materials entering into the construction—something about the degree of skill in the workmanship—something about the responsibility of the company behind the machine.

The Champion, Deering, McCormick, Milwaukee, Osborne and Plano machines are equipped with every known improvement and mechanical principle that would in any way tend to insure better work in the field. The workmanship and materials are the best that can be secured.

This means that if you buy one of these machines you will secure one that is made to work successfully.

In building these machines, inventors and designers work together for the development and improvement of every principle and detail in construction, and hence it is possible for this company to offer you machines that represent the highest attainment in both design and construction.

In other words, when a Champion, Deering, McCormick, Milwaukee, Osborne or Plano machine is in operation on your farm, you can feel assured that it is going to do the work as it should be done. The designers work year after year in the field studying conditions, and the improvements that are being made from time to time place these machines in a class by themselves.

After working a whole year to grow a crop, you cannot afford to place your harvest in jeopardy—you cannot afford to put yourself in danger of unnecessary delays in the harvest field. In other words, you should have a machine that can be repaired quickly if anything should go wrong.

If you have one of these binders, there will be no occasion for worry, because every dealer handling one of these lines carries a full stock of repair parts. Under ordinary conditions the machine will not break or get out of order—for each machine is tested and retested under far more trying conditions than will ever be encountered in the harvest field.

In the manufacture of these machines, the principle of construction is right—the materials are right—the workmanship is right—but, of course, all these things could not be done without an adequate organization—facilities to secure the proper raw materials and to employ skilled workmen and equip the manufacturing plants with the most modern facilities for turning out the machines. It is the thorough work in the selection of the raw materials and designing machines and the careful construction that lessens your responsibility when you go into the harvest field. Therefore, it behooves you not to make a mistake when you buy your binder.

Now, while you have the time, get ready for a full-value harvest. Call on the dealer. Ask him for a catalogue of whichever of these six tested and proven dependable harvesting machines you want.

If you do not know a dealer near you, write to our Chicago office, or any of our branch offices, and a dealer's name and address will be sent you promptly.

Second in importance only to a perfect machine is perfect binder twine. No better twine can be made than Champion, McCormick, Deering, Osborne, Milwaukee, Plano and International in sisal, standard manila and pure manila brands. These twines—and repairs that fit for all machines of the International line—sold by dealers everywhere.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.

(Incorporated)

found opportunity to interview a few busy dray drivers they would tell you that they know "Mica" is all right because they use it—and if you ask further why it's all right, they would say. "Oh, it stays on, it wears better than any other grease and it makes a truck run easy."

There you have it! It stays on, and it makes wheels run easy. No wonder more Mica Axle Grease is sold than of all other kinds combined.

THE SPLIT HICKORY BUGGY BOOK.

Get your name in to the Ohio Carriage Mfg. Co. for their Split Hickory Buggy Book. It shows 125 styles of buggies, surreys, phaetons, etc., and many styles of harness. It's the most complete buggy book ever issued by anybody and shows just how you can save from 30 to 50 per cent. on a buggy. It tells how you can try any Split Hickory Vehicle Free for thirty days on all the roads in your neighborhood. It quotes remarkably low prices on all buggies sold direct to you from their factory and it tells you why these prices are so low. Big purchases of finest grade raw materials at panic time when the raw material men needed money most. That is why the low prices are lower this year than ever before. Send in a postal card with your name and address on it. You'll be mighty glad you spent

a penny to get this big book. It's worth big money to you because it shows you how to save big money. And it gives information to buggy buyers that makes it a valuable guide to buggy buying. We suggest that you get this book before you buy a buggy of any kind. Just address a postal to Mr. H. C. Phelps, President, Ohio Carriage Mfg. Co., Station 294, Columbus, Ohio.

A HOME CANNING OUTFIT.

Growers of fruits and vegetables often find themselves with a surplus which they cannot sell. The market may be overstocked or the prices poor, but, whatever be the cause, the extra supply must be either unloaded very quickly or represents a total loss.

With the ever-increasing demand for canned foods of every description, the solution of the question becomes very easy indeed. A home canning outfit, for taking care of the farm products that cannot be sold, will prove itself a splendid investment in nearly every case.

Such equipment need not be costly or elaborate, and splendid profits are assured.

A good home canning outfit now on the market is the "Stahl." This machine is thoroughly well constructed, is easily operated, and is reasonable in price. The manufacturers claim

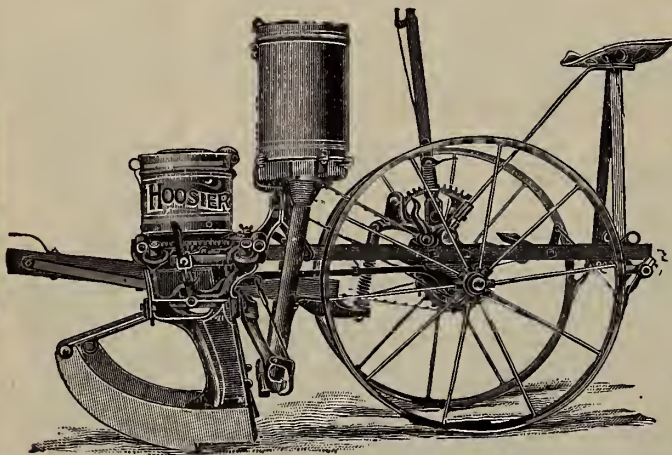
that no experience is necessary and that the directions given are sufficient to operate it successfully, the truth of which appears to be sustained by the fact that thousands of Stahl Outfits are in satisfactory service all over the country.

At any rate, canning seems to be the most profitable way to dispose of surplus farm and garden produce, and the F. S. Stahl Mfg. Co., makers of the Stahl Canning Outfits, whose address is Box 357-C, Quincy, Ill., will be pleased to send literature and answer inquiries upon this subject.

BOOK REVIEW.

Swine in America—By F. D. Coburn, Secretary, Kansas Department of Agriculture. Illustrated, 704 pages, 6x9 inches. Cloth. Price, net, \$2.50, postpaid. Published by Orange Judd Company, New York.

A man who breathes optimism in every breath, who loves agriculture above personal preferment, who studies the problems of the farm day and night, is F. D. Coburn, of Kansas. He stands, to-day, the foremost authority on alfalfa. His great book on that subject is a guide to every grower and a text-book to every student. What he had already done for alfalfa, Mr. Coburn now has done for swine. This vast industry is treated in his new work, "Swine in America," in a most exhaustive manner. Every phase



NEW IDEA MANURE SPREADER.

Built like a wagon—Axles same length. Tires 4 inches wide—Best on earth. Write for special offer on first machine sold in each county of our territory.

F. C. HOENNIGER & BRO. INC.
1432 E. MAIN ST., RICHMOND, VA.

F. C. HOENNIGER, Pres. & Treas.;
T. W. HOENNIGER, V.-Pres. and Mgr.;
L. O. BOONE, Secy.

HENCH & DROMGOLD

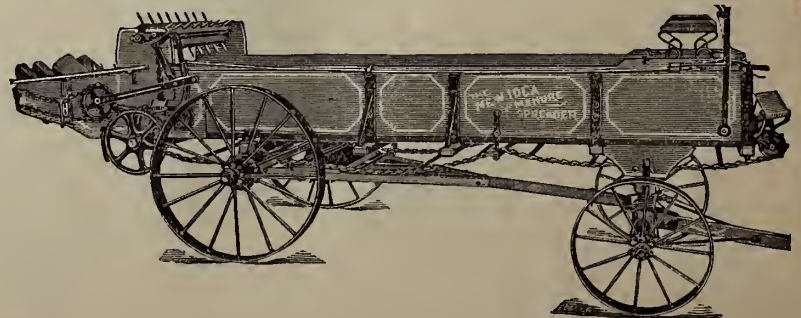
CORN DRILLS.

HOOSIER AND SATTERLEE

CORN PLANTERS AND WIRE CHECK-ROWERS.

POSTAL US FOR CATALOGUES OR ANY INFORMATION DESIRED.

Fairbanks-Morse Gasoline and Kerosene Engines, Wind-Mills, Towers, Tanks, New Holland Corn and Cob Mills, Wood Saws, Cwensboro and Buckeye Farm Wagons, Hickory and Peters Buggies and Carriages, Bissell and Genuine Dixie Plows and Repairs, J. I. Case Portable and Tractor Engines, Separators.



of hog-raising is considered from a practical standpoint, and the latest contribution to the science and art of handling and managing hogs weighed and discussed in this important work, to the hour of publication.

The work is a companion volume to "The Book of Alfalfa" in style, make-up and treatment. When one considers the immense business involved in the swine industry, he at once recognizes the need of a trained level-headed spokesman. This man we have in this author. We have his wide experience, thorough knowledge and warm sympathy and enthusiasm, all of which is presented in a clear, convincing, earnest style, the power for so doing being a proverbial quality and attribute of Mr. Coburn. If you have anything at all to do with hogs, get this book.

This volume is handsomely printed on fine paper from large, clear type and is profusely illustrated, containing a large number of magnificent half-tone illustrations and drawings, many of them full-page plates, which are printed on a special plate paper. Another marked feature is the frontispiece, this being an anatomical and physiological model of the hog, which appears in a book of this character for the first time.

The work contains 704 pages (6x9 inches) in fine silk cloth, gold side and back stamping, making one

of the handsomest and most attractive agricultural books ever placed before the public, and no one can claim to be up to date in swine matters unless he possesses a copy.

We can supply this book at the publishers' price.

DISPERSAL SALE OF GROVE FARM GUERNSEYS.

Attention is invited to the announcement of the sale of the Grove Farm Guernseys, owned by J. McK. Merryman, of Lutherville, Md. This should be a splendid opportunity for a number of our dairymen to get some good cattle at their own prices. Many of our readers have seen this herd at the State Fairs at Richmond for several years. They have always won wherever shown. Look up the ad, and send for a catalogue.

MAGAZINES.

The May Century has fiction a plenty—the last chapters of Alice Hegan Rice's novel, "Mr. Opp," and stories in which humor is the dominant note by Mary Heaton Vorse, Adeline Knapp and W. Albert Hickman—but leading place is given to Thomas Nelson Page's story, "The Old Planters," a tale of a quaint old hostelry in Virginia, and of the quaint old aristocrat who played host, and of the guests who came and went.

A wide range of matters much in

the public mind is covered in the number: William M. Ivins, Chairman of the New York charter commission, in a paper on "Public Service Commissions," comments on Frederic W. Whitridge's paper on "Public Morality and Street Railways," in the March Century; Christian Brinton gives critical estimate of the two great Spanish painters whose work is being shown in this country, Sorolla and Zuloaga; "The New Basis of Work for the Blind" is discussed by Samuel H. Bishop; Daniel Gregory Mason has recorded a conversation on music with Ossip Gabrilowitsch; and Cardinal Gibbons and Professor Edward Aisworth Ross have much of interest to say on America's increasing divorce rate and its significance.

There is a graphic account by Edward Beecher Bronson of "Big Game in E. Africa," based on facts and incidents of the writer's experience while a guest of Mr. William Northrup McMillan, the young American who is preparing to entertain ex-President Roosevelt, at Juja farm, near Nairobi, the center of the big game country of British East Africa.

Not the least interesting and important article of the number is the narrative of how, in less than six years, 388,000 American farmers have pulled up stakes in "the States" and moved to free homesteads in the Canadian Northwest. That story is told in "The

Plan for Summer Comfort

Don't add the heat of a kitchen fire to the sufficient discomfort of hot weather.

Use a New Perfection Wick Blue Flame Oil Cook-Stove and cook in comfort.

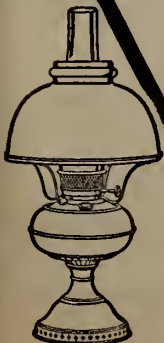
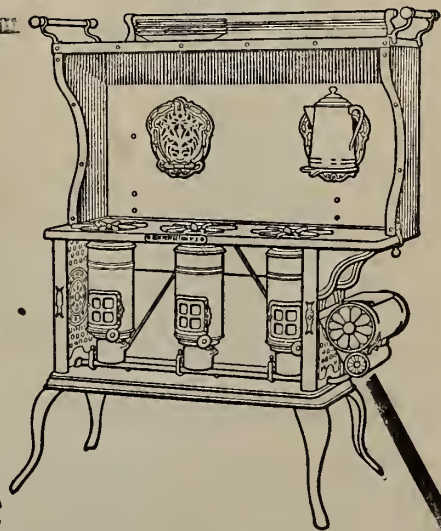
With a "New Perfection" Oil Stove the preparation of daily meals, or the big weekly "baking," is done without raising the temperature perceptibly above that of any other room in the house. Another great advantage of the

NEW PERFECTION Wick Blue Flame Oil Cook-Stove

is its handsome CABINET TOP, which gives it every convenience of the modern steel range. Has an ample top shelf for warming plates and keeping cooked food hot, drop shelves for holding small cooking utensils, and is even fitted with racks for towels. Made in three sizes, and can be had with or without Cabinet Top. If not at your dealer's, address our nearest agency.

The **Rayo Lamp** gives perfect combustion whether high or low—is therefore free from disagreeable odor and cannot smoke. Safe, convenient, ornamental—the ideal light. If not at your dealer's address our nearest agency.

STANDARD OIL COMPANY
(Incorporated)



Last Trek to the Last Northwest," by Agnes C. Laut, author of "The Conquest of the Great Northwest," who has travelled through all the territory.

The May St. Nicholas brings the first chapters of an important new serial feature, for the older girls and boys, in Charles H. Caffin's "The Story of Dutch Painting." The author explains that the tale of how the Dutchman of the seventeenth century developed a new school of painting is a part of the story of the lives and fortunes of the Dutch people, and so the story begins with a brief description of the struggle by which the separate provinces became united into a single nation, and of how during the struggle by which the separate provinces became united and the people also found time to advance themselves in the arts of peace, including that of painting.

Day Allen Willey treats a matter of wide and growing interest in his account of "Public Playgrounds," all about what is being done and planned by that splendid organization, the Playground Association of America, which has for the reason of its existence:

The greatest need of American city life to-day is some common meeting ground for the people where business may be forgotten and friendships formed. The playground is already the gathering place for the children

and it is coming to be so more and more for grown-ups.

But this May number of St. Nicholas is jolly as well as entertainingly instructive, with, seemingly, more than its usual quota of short stories, jolly rhymes and merry pictures.

Inauguration is over, the tariff is being attended to, business is getting better and better, and the weather is behaving itself beautifully. Therefore, let Melancholy take to the woods. We'll have none of her. Even in our reading matter let us demand that which is pleasurable and optimistic. Both of these adjectives, by the way, aptly describe the May Lippincott's, which is filled from cover to cover with an assortment of stories and special articles, jokes and poetry, as varied as they are entertaining.

The complete novel, "The Pomegranate Seed," by Katharine Metcalf Roof, is one of the most delightful love stories which have appeared in a decade. It is quite probable that the marriage of a popular light opera star to a well-known novelist, not long ago, gave to the author the idea for her plot. Her hero, it happens, is an artist, her heroine a dainty young singer in comic opera. Miss Roof's characters are admirably drawn, even the minor ones being clear cut and vivid. Griselda, the singer, is wholly charming, and one doesn't in the least blame

Stephen for falling in love with her. The plot is ably handled and the theatrical atmosphere distinctly good. The tale holds the reader's interest till the end, despite the fact that "battle, murder and sudden death" are conspicuous for their absence.

The short stories are of a high order of excellence. Mary Roberts Rinehart, author of "The Man in Lower Ten" and "The Circular Staircase," contributes a breezily funny story called "Lady Godiva at the Spring;" Maarten Maartens, a vividly powerful character study entitled "Mrs. Marsham;" Elsie Singmaster, a characteristic tale of the Pennsylvania Germans—"Thousand Dollar Daggett;" and Minna Thomas Antrim, "The Eavesdropper," a clever love story. "The Departure," by Ella Wheeler Wilcox, is another charming bit of fiction.

Among the special articles is a strong paper on "Shall Women Vote?" by the brilliant novelist, Ouida, who died not long ago. "The Tricks of Memory," by William Trowbridge Larned, is amusing and entertaining. W. B. Blake, Clifford Howard, and Ellis O. Jones are the writers represented in Lippincott's unique department, "Ways of the Hour."

Roscoe Gilmore Stott, Alice E. Allen, J. B. E., Cora Walker Hayes, and Charles L. O'Donnell have creditable verses in this May number. The "fin-

NATIONAL PNEUMATIC WATER SUPPLY

FOR COUNTRY AND SUBURBAN HOMES.

Gives all the advantages of a city water works and furnishes fire protection, which reduces insurance rates. The accompanying sketch shows a complete water system, bath and kitchen plumbing.

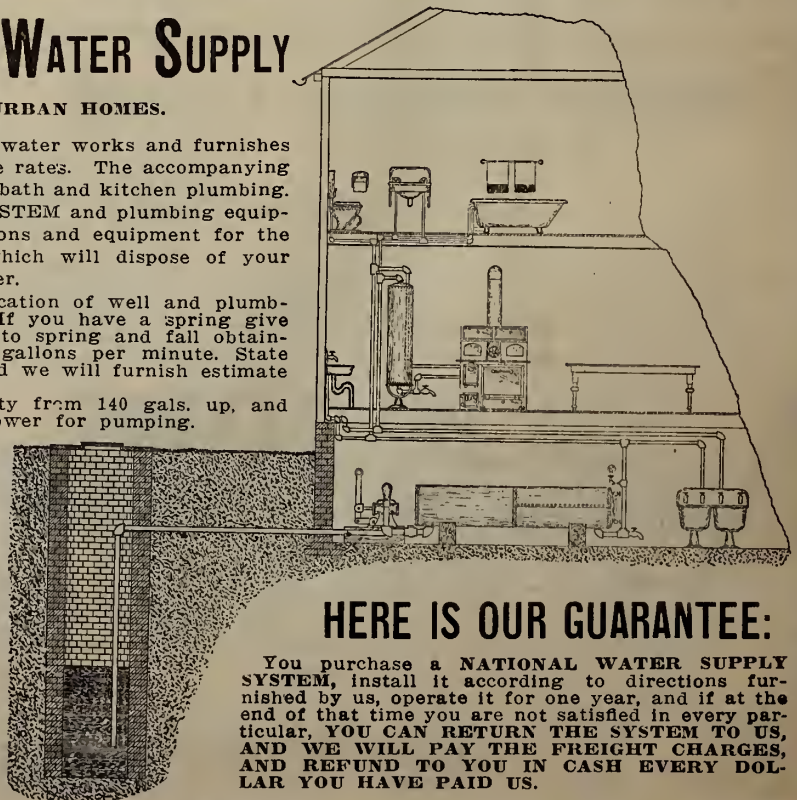
In connection with our WATER SYSTEM and plumbing equipment, we furnish plans and specifications and equipment for the construction of septic sewer tanks which will dispose of your sewage in a most satisfactory manner.

Send us rough sketch showing location of well and plumbing fixtures and give depth of well. If you have a spring give distance from house, fall from house to spring and fall obtainable in spring, branch, and flow in gallons per minute. State how much water required per day, and we will furnish estimate of cost free.

We furnish system in any capacity from 140 gals. up, and for the application of any kind of power for pumping.

Get our prices on WINDMILLS, GASOLINE ENGINES, HOT AIR ENGINES, PUMPS OF ALL KINDS, AND HYDRAULIC RAMS. INQUIRE ABOUT OUR BURNSON RANGES. WRITE FOR CATALOG.

**GRAHAM I DAVIDSON &
COMPANY,**
Richmond, - Virginia.



HERE IS OUR GUARANTEE:

You purchase a NATIONAL WATER SUPPLY SYSTEM, install it according to directions furnished by us, operate it for one year, and if at the end of that time you are not satisfied in every particular, YOU CAN RETURN THE SYSTEM TO US, AND WE WILL PAY THE FREIGHT CHARGES, AND REFUND TO YOU IN CASH EVERY DOLLAR YOU HAVE PAID US.

ishing touch" is supplied by "Walnuts and Wine," a sixteen-page humorous section.

Caroline Co., Va., March 9, '09.

The Southern Planter is O. K. and I always speak a good word for it at every opportunity. Farmers in general should read its columns carefully and thereby reap the benefits resulting from the excellent advice if heeded.

T. E. JONES.

GOVERNMENT ENCOURAGING WILLOW CULTURE.

Distributes 100,000 Cuttings from Washington.

Washington, March, 1909.—The government is right in the midst of the harvest of a most unique crop at its experimental farm near Arlington, just across the Potomac from this city, where a corps of laborers in charge of trained foresters are preparing for the annual free distribution of 100,000 basket willow cuttings.

Uncle Sam is encouraging the growing of high-grade willow rods in this country, and in the five years since the establishment of the holts at Arlington approximately a half million

select cuttings have been distributed among farmers, with directions for planting and preparing for market. Particular attention is given to selecting the varieties and strains best suited to the soil where the plantings will be made.

Willow-craft is an industry which is constantly growing in importance in this country, yet the culture of basket willow in the United States made very little progress until five or six years ago. Even now, practically all of the best grades of basket willow are imported from Europe, chiefly from France. European manufacturers compete keenly for the best products in their countries, and until recently only the inferior rods were sent to America, where they have been bought at three times the prices quoted for similar stock a few years ago. Experiments have shown that the best grades of willow can be grown in this country at a good profit, and farmers are turning their attention to its culture more and more each year.

This year's harvest began early in March. Four approved varieties are being sent out and only the best and most thrifty rods are selected for dis-

tribution. The management of the holts and work of free distribution of cuttings is charged to the United States Forest Service. Cuttings for experimental planting and information on management of the willow holts are furnished those who make the request of the Forester at Washington.

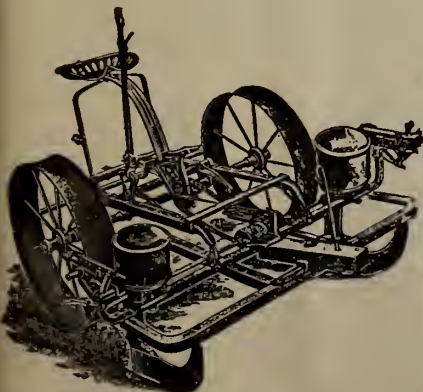
The government recognizes the importance of good cuttings, a point more commonly overlooked than the matter of cultivation. Only the best and most thrifty rods are selected for each season's distribution. To produce a desirable grade of rods, it is very important to select planting stock not only from thoroughly tested varieties, but the cuttings should be taken from the tallest, perfectly straight, cylindrical, branchless and fully mature rods. High-grade basket willows can be raised only by being sure that the cuttings planted are from parent stock above the average.

The policy of the Forest Service is to increase the number of important basket willows and determine their value under different soil and climatic conditions, and as the final tests of new varieties are completed, those proved to be valuable will be added to the distribution list.

LEADING 1909 UP-TO-DATE LABOR SAVING TWENTIETH CENTURY MACHINERY.



ONE AND TWO-HORSE PLANTER PLAIN OR WITH FERTILIZER ATTACHMENT.



The CASE Edge and Round Hole Drop Corn Planter, superior in points of merits to any other sold here. Call and see the sample and we will prove it. Furnished with Fertilizer attachment if wanted, also check rower. Write for special planter circulars.



The "GENUINE BROWN RIDING AND WALKING CULTIVATORS. Write for special catalogue and prices.



Keno's Twentieth Century Improved Manure Spreader. Made in three sizes Write for prices and catalogue. Studebaker Buggies, all styles; Studebaker Carriages; Studebaker Carts; Studebaker Runabouts. Special Prices given on Studebaker and Brown Wagons, Buggies and Carts.



PLYMOUTH TWINE. Even, Smooth, Strong, Full Length, Every Ball Warranted.



MILWAUKEE HAY TOOLS AND FORKS—All styles. Write for circulars and prices.

Champion Binders, Mowers, Rakes, and Tedders, all sizes.

Keystone Hay Loaders and Rakes.

ANTI-DIRT MILK PAIL.

First, it prevents dirt, hair and other substances from dropping into the milk while milking.

Second, It strains the milk twice through two fine strainers while milking.

HENING & NUCKOLS, 1436-38 E. Main St., Richmond, Va.

Spotless Paint at only 98 cents Per Gallon.

**THIS LARGE TWO
STORY HOUSE
PAINTED FOR
\$12.21**

A Large, Two-Story, Ten or Twelve Room House like this painted with Spotless Ready Mixed House Paint, two cents, for \$12.21.

This large house, measuring 23 feet wide by 40 feet long and 24 feet in height will require

11 gallons for body
10 gallons at 98 cents per gallon... \$9 30
1 gallon at 97 cents per gallon 97
2 gallons for trimming at 97 cents per gallon 1 94

\$12 21



DO YOUR OWN PAINTING

and buy your paint from us and thereby saving \$10.00 to \$20.00 on every building painted. Make your house and buildings proof against time. Increase their value and have the handsomest house in your section.



A Large Modern Barn Like This Painted with our SPOTLESS WEATHERPROOF PAINT, two coats, for \$8.45.

This large barn, measuring 30 feet wide by 50 feet long and 22 feet in height, will require—

12 gallons for body, 10 gallons at 59 cents per gallon.....\$5 90
2 gallons at 64 cents per gallon..... 1 28
2 gallons for trimming, at 64 cents per gallon 1 28

\$8 46

of our Spotless Weatherproof Mineral Barn, Roof and Fence Paint, the most durable mineral paint made. Guaranteed to wear five years.

We sell \$1.50 Paint at 97 cents per gallon, or as low as 84 cents per gallon in larger quantities. It is as good paint as the kind you pay your dealer \$1.50 per gallon for.

OUR FREE TRIAL PLAN. We make every shipment under our binding guarantee that you may open and use any three gallons of paint you wish, putting it to the hardest test, and if you find that we have not shipped you a paint of as high quality as you can buy anywhere, regardless of price, just ship

back the unopened paint and we will not charge you for the three gallons used, but will refund all your money and freight charges. You must admit that this is a fair proposition.

OUR FIVE-YEAR GUARANTEE is that it will not blister, peel, chalk, crack nor rub off. Send us your name and address to-day for color cards and complete catalogue, sent free, or order from this ad. if in a hurry. It means a saving of more than one-third on your paint bills.

SPOTLESS CO., INC., 122 SHOCKOE SQUARE RICHMOND, VA.

If you will write us the dimensions of the building you want to paint we will tell you the amount of paint necessary to cover it properly.

SEND FOR OUR FREE CATALOGUE AND COLOR CARD TO-DAY.

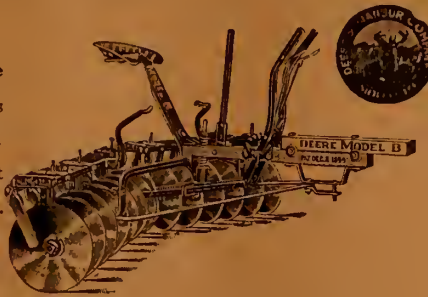
LABOR SAVING IMPLEMENTS AND MACHINERY.

FOR SALE BY

THE WATT PLOW CO., Richmond, Va.



The John Deere Riding Plows Excel all others. In light draft and good work.



We have the celebrated Deere and Johnston's Disc Harrows which are made to do the work.

Deere and Black Hawk 2 Row Planters with Tilting Hoppers. Have fewer parts and less working joints than any other. Seed plates can be removed without taking corn out of box. Furnished with or without fertilizer attachments.

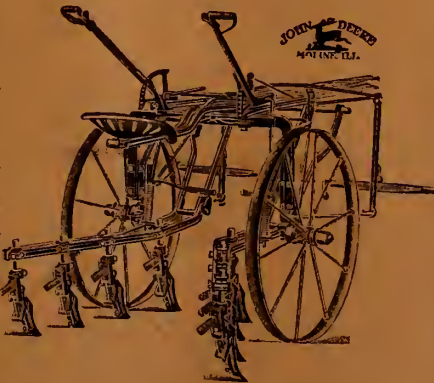


The Deere Universal spike tooth harrow is strong, flexible and durable. Has a level which is provided with a spring trip which preserves the teeth when using harrow in stony or rooty ground.



No. 24 Deere Riding Disc Cultivator.

Another successful tool of our own manufacture. Built on such principles as to overcome all opposition to tools of this class. Its wide range of adjustments, peculiar to the Deere Disc Cultivator alone, adapts it to all classes of farm cultivation.



K. A. Pivot Axle Cultivator.

A general purpose cultivator, adapted for a very wide range of work, such as corn, potatoes, tobacco, cotton, beans, cabbage, peanuts and general truck farming.

Equipped with pivot wheels for work on hill-sides and in irregular rows or for work in listed corn. The wheels, guided by the feet, may be instantly turned to the right or left as desired. They can be made rigid for level work by a hook rod.

Agents for the Deere and Black Hawk Planters. The only successful drop planters on the market. Furnished with or without fertilizer attachment. Write us for special booklet called "More Corn." Every farmer who plants corn should have it. It is free.



We give mail orders our special attention and invite your correspondence.

THE WATT PLOW COMPANY,

RICHMOND, VA:

1426 East Main St.

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ANOTHER RECORD BREAKING YEAR FOR THE
NORTHWESTERN MUTUAL LIFE INSURANCE COMPANY.

GROWTH OF COMPANY.

	New Business Paid For. (Not Including Additions.)	
1904 Largest Year in Previous History of the Company	.....	\$ 73,876,037 00
1905 Largest Year in Previous History of the Company	.....	90,334,038 00
1906 Largest Year in Previous History of the Company	.....	93,885,273 00
1907 Largest Year in Previous History of the Company	.....	102,242,280 00
1908 Largest Year in Previous History of the Company	.....	109,773,709 00

SURPLUS ACCOUNT DECEMBER 31, 1908.

Dividends apportioned for payment in 1909	.....	\$ 11,190,411 56
Deferred Dividends on policies maturing after 1909	.....	16,847,000 00
Total Future (assigned) Dividends	.....	\$ 28,040,411 56
Unassigned Surplus	.....	4,465,646 40
Total Surplus Funds (on basis of values furnished by New York and Massachusetts Ins. Depts.)	.....	\$ 32,512,057 96

T. ARCHIBALD GARY,

General Agent for Virginia and North Carolina, 601 Mutual Assurance Society Building, RICHMOND, VA.

- - Corrugated V-Crimp Roofing - -



..... painted and galvanized
"Bestoid" Rubber Roofing
Carey's Magnesia Cement Roofing
 Tarred Paper, Tin Plate, Lime, Cement, Hardware, Terra Cotta Pipe, Wire Fence, Drain Tile, etc.

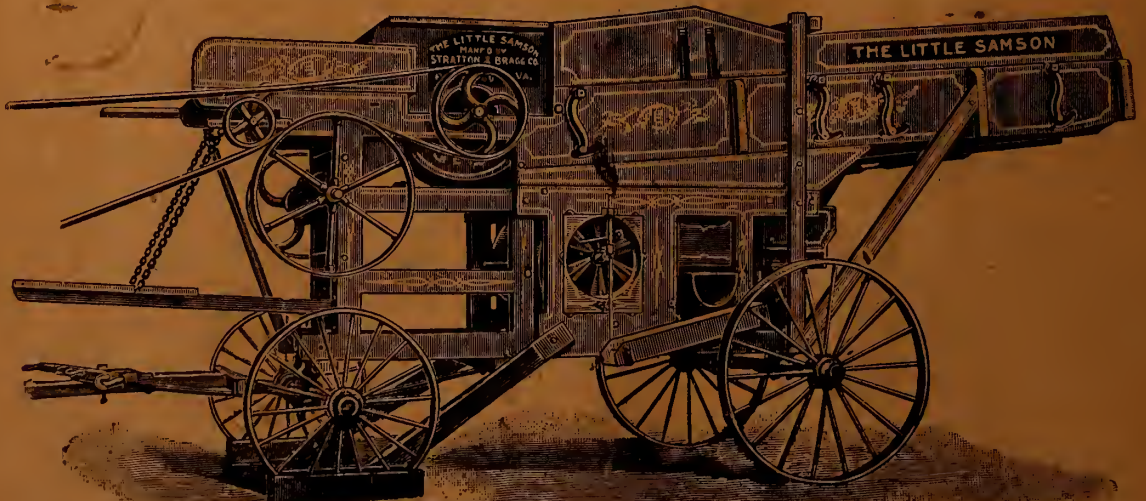
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BALDWIN & BROWN.

1557 E. MAIN ST., RICHMOND, VA.

THE LITTLE SAMSON PEANUT PICKER

AND GRAIN THRSHER COMBINED



The above machine can be bought as a Peanut Picker and at a small additional cost the Grain Threshing Attachments can be secured, which will enable the same machine to thresh Grain; or we can furnish a straight grain machine for grain only.

Simplest, lightest and most durable machine on the market, and sold at reasonable prices. Furnished either mounted or unmounted. Write for prices. Also see our advertisement on another page of our Little Samson Vertical Engine with Pickering Governor.

STRATTON & BRAGG CO.,

Petersburg, Virginia.