The Southern Planter.

DEVOTED TO

PRACTICAL AND PROGRESSIVE AGRICULTURE, HORTICULTURE, TRUCKING, LIVE STOCK AND THE FIRESIDE.

> Agriculture is the nursing mother of the Arts.-XENOPHON. Tillage and pasturage are the two breasts of the State.-SULLY.

69th Year.

RICHMOND, VA., SEPTEMBER, 1908.

No. 9.

Farm Management.

WORK FOR THE MONTH.

When we wrote our article, "Work for the Month," for the August issue we were beginning to feel the effects of two or three weeks of dry, hot weather, and had complaints from many sections of the South of damage being done to crops. We intimated at the time that we thought there were indications of rain near at hand. This fortunately came pretty generally over this State, and also in North Carolina, and the last week in July and the first week in August gave water enough to save the crops for this year even had no more come, and yet we had no destructive floods. This wet period was followed by two weeks of high temperature, and crops made a wonderful growth and now bid fair to make at least average yields. At this writing (21st August) we have showery weather and a cooler temperature, but yet very seasonable for the corn and forage crops, and it is putting the land into fine working order for the seeding of grass and the fall grain crops.

The Government report on the condition of crops places the yield of winter wheat at an average of 14 bushels per acre, or a total of 425,940,000 bushels, which compares with 14.6 bushels per acre and 409,442,000 bushels last year. From reports from various sections of the country as to threshing results, we are strongly of opinion that this will prove to be an overestimate of the yield of the winter wheat crop, and we adhere to our estimate made in the last issue, that the crop will not greatly, if at all, exceed 400,000,000 bushels. According to the Government report on the spring wheat crop the condition on August 1st was 80% of a normal, as compared with 79 per cent. a year ago, and a ten-year of 82.70. Since the date of this report there have been reports of considerable injury to the crop from rust and drouth in many parts, and the indications are that the next report will show considerable deterioration in condition and the prospect of a much smaller crop than was anticipated. We are of opinion that this crop will not be much larger than that harvested last year-225,000,000 The total bushels. It may reach 235,000,000 bushels. wheat crop may therefore be conservatively estimated at tions of the country seem to indicate that this is an ex-

635,000,000 bushels, or perhaps it may reach the total of last year's crop if no further serious damage is done the spring wheat The price on the markets indicates that in the judgment of the public the crop is not an excessive one. and that it will all be needed, but not so badly needed as to cause the price to advance materially, say not much, if any, beyond \$1.00 per bushel. It is now selling around 90 cents. If Canadian and European crop prospects had not been so promising generally the price of wheat here would tend to be much higher, but Canada has an excellent prospect, and is now so large a producer as tohave a very material influence on prices. The English crop is an average one, whilst the European continent has promise of better yields than last year; hence the demands for these countries will not exceed the normal. The great peculiarity in the wheat crop this year is the failure of the threshing returns to come up to expectations, as indicated by the growing crop. We have had complaints from all sections of this State and the South that crops which looked like making 20 bushels to the acre did not in many cases make more than half this yield, and rarely went beyond 15 bushels. We note the same complaint in other sections of the country. The cause is difficult to assign, but we are of opinion that it is climatic and mainly the result of wet weather at the blooming time, causing defective pollination of the grain.

The condition of the oat crop on August 1 was 76 per cent. of normal as compared with 85 last month, 75 on August 1 last year, and a 10-year average of 83. This means that the crop, like that of last year, is going to be much below the average and the price will likely keep firm, and have also the effect of keeping up the price of corn.

The condition of the corn crop on August 1 was 82 per cent. of a normal as compared with 82 per cent. last year, and a ten-year average of 83. This would indicate a total crop of something like 2,650,000,000 bushels as against 2,-600,000,000 last year. Reports, however, from wide sec-

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cessive estimate, and that the probabilities are that the crop will not exceed that of last year, even if it reaches that. There does not seem much chance of corn becoming lower in price for some time to come. Here in the South we have promise of an average crop, but as we fail to make the corn needed to meet our demands, this will not avail us to prevent a comparatively high price for the grain.

Looking over these reports and considering their import it would seem that there is truth in the statement that the day of low prices for grain of all kinds is past. Demand has caught up with production, and unless farmers bestir themselves and make efforts to secure greater yields per acre by better methods, the people of the country will either have to curtail consumption or still further increase the cost of living, which is now higher than ever before known. We rejoice that farmers are now able to secure such prices for their products as to make production profitable, and should regret much to see a reversion to prices common, say, ten years ago. Unless better methods of production are introduced more generally amongst farmers and greater economy observed in husbanding and increasing the fertility of the farms, we shall soon be at that time which has been predicted when the people of this country will have to look to other countries to provide them with a large part of the necessaries of life. Population increases at the rate of a little over 2 per cent. per annum, while the area under cultivation in crops increases but little, and even that little is more than offset by the decrease in fertility of land which has long been under cultivation. The farmer of the past has been a soil robber, and the farmer of the present is still but little better. There is a bright future for the farmer of to-day who has attained such skill in his business that he can grow profitable crops and at the same time maintain the fertility of his land. The demand for products by the nations of the old world grows daily and the limit of production in those nations has been nearly reached. The only source of supply outside this nation is from Canada and the Argentine, and as yet these two countries have not the population to enable them to produce sufficient to meet the demands made by the old world nations. The problem of the farmer to-day in this country is to so master the science of agriculture as to enable him to meet the demands, not only of our own ever-increasing population, but that of the old world. This can be done, as we do not produce half the yields our lands are capable of producing. This increased production does not mean decreased prices for the products for the reasons stated, and there is therefore every inducement to strive for this. We are at the beginning of a new crop seeding year. The land to be seeded in wheat is now to be prepared to fit it for the crop. Let each farmer enter upon this task with a determination to make the preparation better than ever before, and so continue with every crop to be raised on the farm. There will be a demand for every additional bushel that can be grown.

Large crops of hay and forage have already been saved and the weather we have had is bringing on other large crops. See that constant attention is given to the sav-

ing of these as they mature. The demand for live stock is good at high prices and is likely to continue so, and Southern farmers should put themselves into a position to help to meet this demand. In the past we have wasted millions of tons of feed which should have gone into live stock. Formerly it did not pay to save this now there is a good profit in properly utilizing it. Let us put ourselves into a position to keep our meat house at home and not be dependent on the West. At this time of the year the forage crops require more care and attention in the curing than earlier in the season, but with proper attention a better quality of feed can be made than when the sun is so hot as to scorch and burn the leaves in the process of curing.

The filling of the silos will call for attention this month. The silo is now making headway on our farms all over the State and we hear of more new ones being built this year than ever before. The silo is the cheapest barn that a farmer can build. In it he can save more of his feed at less cost than in any other way and have it in a form which makes it acceptable to stock, and productive of better results, besides being much more economical to handle in the feeding. It is equally profitable on the dairy and the beef farm. More milk and more beef can be made at less cost from feeding silage than from feeding dry forage. Let the corn and sorghum crops become nearly mature before putting them in the silo. A better quality of silage can be made from matured products than from green and immature crops. If peas and soy beans are to be put into the silo they also should be as nearly matured as possible. When using these crops for this purpose they make better silage when mixed with the corn and sorghum as it is cut into the silo than when siloed by themselves. Mixed at the rate of one-third peas or soy beans, and two-thirds corn or sorghum a balanced ration will be made which will be found to vield excellent results in the feeding. Do not fill the silo too fast. It is better to cut half a day and fill half a day than to hurry it all in at once. The silage will heat and cure better, and the silo will hold much more. See that the sides are packed closely, so as to leave no pockets of air, and have the cut ears equally distributed over the silo. These have a tendency to accumulate under the carrier unless attended to. When filled cover with cut straw, or swale hay to the depth of a foot, and water this freely and it will pack and fill with mould and preserve the silage.

The seeding of alfalfa should be done this month. In our last issue we said something on this subject, and in this issue will be found two articles further dealing with it. We want to see every farmer in the State experiment with it, but do not wish to see them waste money in sowing a large area until they have demonstrated that they can grow it successfully. We believe that it can be grown all over the State when conditions have been made suitable for it, but it is useless to attempt to grow it on poor land or on land without a large percentage of lime in its composition. You cannot give alfalfa land too much lime.

The seeding of grass and clover should be finished this month. In our last issue we wrote fully on this subject,

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and to that issue refer our readers. Sow grass and clover alone if you want a good permanent stand which will be profitable from the start. Do not sow grain of any kind with it.

The winter oat crops should be seeded this month. In our last issue we wrote on this subject, and refer our readers to what we then said. The oat crop throughout the country has again made a reduced yield, and the price of oats is likely to remain good for another year at least, and probably for several years, as we have now had two short crops. We believe that it will pay Southern farmers better to grow oats in most sections than wheat. A heavier crop of oats can be made on poorer land than wheat. Oats will also usually pay better for liberal fertilization than wheat. The mistake usually made in the South in growing oats is seeding them too late, and not giving them sufficient help with fertilizer and manure, and in not putting them sufficiently deep in the ground. The mineral fertilizers should be used liberally at seeding, and manure and nitrate of soda be applied as a top dressing in the winter and spring. Use 150 to 250 pounds of acid phosphate previous to sowing, and top dress with manure liberally during the winter, and if this be not available top dress with 100 pounds of nitrate of soda in the spring when the oats begin to grow freely. The Virginia Grey winter oat is the best for seeding at this time. Later the Appler, the Burt and the Texas Rust-Proof are more certain in their yield. These may be sown in February and March.

The work of preparing the land for the seeding of wheat should have constant attention as opportunity offers during this month. October is soon enough to sow the seed. Wheat succeeds best on loam or clay lands, well filled with fertility, and the soil should be deeply broken early, and thus have time to become compacted again before the seed is sown. Wheat never succeeds on land which is loose and open below the top three inches. But at the same time it must have been broken deeply enough to allow of perfect drainage, and the holding of sufficient moisture to keep the plant supplied during the period of growth. After having been thus deeply broken, the better it is compacted so as to give firm roothold to the crop, the more likely is the crop to succeed. Therefore, after having plowed the land well commence the cultivation of it with the harrow and roller, and keep this up at intervals of a week or ten days until time to sow the seed. More depends upon the perfect preparation of the land before the seed is sown than upon the fertilizer used; therefore, see that attention is given to it. The small yield secured on many farms this year has caused us to be inundated with enquiries as to what fertilizer to use to cause a better filling of the ears in the future.

On our best wheat farms the production of straw has been heavy, but the ears have filled badly. Whilst we think that much of this trouble was caused by climatic conditions at the blooming time, yet there is no doubt that we need to study the question of the fertilizer to be used with more care than we have done. We have spent many hours reading the reports of the experiments made in the

and in England in order that we might, if possible, help in the solution of this difficulty. We confess that we have derived but little satisfaction from this labor. Wherever farmyard manure has been used as the fertilizer good results have almost universally been secured, but the difficulty in the South is that there is a scarcity on nearly all farms of this manure. Where farmyard manure and raw or acid phosphate has been used the results have also been generally satisfactory. The use of commercial fertilizers on worn land, deficient in humus and in bad physical condition are shown to have been practically a total loss wherever tried. This emphasizes the fact that a high humus content in the soil and a good physical condition are essential elements of success. To secure these cowpeas grown as a preceding crop, and cut into the land have been found very profitable. On such land the application of raw or acid phosphate, or bone meal will almost invariably give good results. Lime also seems to have a good effect in that it puts the land into a better physical and mechanical condition. In our own experience we always applied lime when preparing the land for wheat. It should be used at the rate of from one to two tons to the acre. Its effect on making the potash available no doubt helps to secure a better grain. Farmyard manure being essentially a nitrogenous fertilizer, its good effect would seem to show that wheat requires nitrogen liberally, but the effect of nitrogenous manures being largely the production of stalk and leaf growth, it would seem to be essential that there should be at the same time a liberal use of phosphoric acid, which is primarily effective in the making of grain or seed. In many of the experiments made the dominant factor in securing a heavy yield was demonstrated to be the quantity of phosphoric acid available for the crop. Our own experience in conjunction with the results of these experiments leads us to the conclusion that phosphoric acid supplied by bone meal or acid phosphate is the most essential requisite to secure plump, well filled ears, and that to secure the best results this should be supplemented with nitrogen, either derived from leguminous crops, cut into the soil now, or farmyard manure applied as a top dressing in the winter, or by a top dressing of nitrate of soda applied in the spring, just when the crop begins growth. Whilst potash in some experiments showed good results when used in conjunction with phosphoric acid and nitrogen, we believe that most of our lands suited to wheat have sufficient of this element, which only requires to be made available by the use of lime. Our conclusions are that we would sow wheat only on land which has grown a leguminous crop which has been cut into the land, or on which farmyard manure has been applied, or to which it can be applied as a top dressing, and that previous to seeding the wheat we would apply 250 to 300 pounds of bone meal, or half bone meal and half acid phosphate per acre, and that wherever lime is available we would use it at the rate of one ton at least per acre, immediately after the land is plowed, and before commencing to harrow and prepare it for the seed. We would then finely prepare the land compact the undersoil and keep the top three inches loose, working the fertilizer in with the harrow, and then in October, say, between the 15th and the end of the month, production of wheat in various sections of this country drill in the seed, giving it a cover of from one and a half

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to three inches, according to the nature of the land. During the winter we would top dress with farmyard manure if it was available, and if not would top dress with nitrate of soda at the rate of 100 pounds to the acre in the spring. We would carefully select the seed, blowing out all small grain and sowing only plump, well shaped grains, and we would seed liberally, say, at the rate of from one and a half to two bushels to the acre. With such a preparation for the crop we should expect to secure not less than twenty bushels to the acre, and ought to get twentyfive. By following such a system of rotation as would bring a leguminous crop onto the land every other year, and using acid phosphate liberally to secure a good crop of legumes, to be cut into the land, we believe that the yield of wheat could be brought up to thirty-five bushels in a normal year, and that this can be done profitably.

Continue to sow crimson clover with wheat, oats and rye on all land that is not to be put into oats or wheat that can be got ready so as to have a winter cover on it. Hairy vetch may take the place of the crimson clover in this mixture if desired, and should do so in the last half of the month, and later up to the end of October. Sow twelve or fifteen pounds of the clover seed or twenty pounds of the vetch seed with three pecks of the grain mixed in equal parts.

If Hessian fly has troubled the wheat in your section this year sow a trap crop of wheat at once on the land intended to be sown in wheat. This crop need only be on a strip of a yard or two wide across the field. The flies will deposit their eggs on this early sown wheat, and this can then be plowed down, and the eggs and flies be destroyed, and thus largely avoid injury another year.

SOME INSTITUTE NOTES.

Editor Southern Planter:

I have just returned from a month's work at the summer institutes in North Carolina, and some notes in regard to what I saw there may not be uninteresting. The only regret that I had in attending these institutes was that it cut me off from having the pleasure of attending the Virginia State Institute, in Richmond, which I greatly desired to attend.

The North Carolina Institutes have been greatly improved under the management of Dr. Tait Butler, the State Director, whose organizing ability has been well shown by the way he has kept five separate parties at work this summer without mishap or failure in any place, except on account of lack of interest on the part of the farmers preventing a large attendance. But in most places the attendance has been full. In two places, in Mecklenburg county (there were five institutes in that county) there were 1,000 and 1,800 people, respectively, and we had the picnic dinners that that famous county is celebrated for.

North Carolina has made an advance in Institute work that is a good example to other States. At every point two ladies, skilled in domestic economy, held an institute for the women. Over a large part of the route we had two cars furnished and moved from place to place gratis by the Southern Railway Company. In one of these was a stock of the most modern farm implements, and when condi- otherwise good farmers, who adhere to the study of the

tions favored there were field trials of some of these. In the other car-a large passenger car-part of the seats were removed from one end, and a well-stocked kitchen and the use of various kitchen conveniences, seats having been left for an audience of sixty women. In the middle of the afternoon the women joined the men, and there was a joint institute attended by all, and a lecture given by an accomplished speaker, Mrs. Mallowell, of Goldsboro, North Carolina, on the duties of the married men and women on the farm.

I was struck with the fact that these institutes were all business meetings. The leader of each party opened the work at once, and no time was wasted in addresses of welcome and responses, but we went to work at once without any parliamentary talk, on the real purposes of the meeting. As a rule, the audiences were there for a serious purpose, and asked a great many questions. At Winston-Salem I took the platform to make an address, and never said a word that I intended to say, for they at once began to fire questions at me, and kept me for a whole hour answering them, and the effect was far better than if I had said what I had intended to say, for the farmers got what they wanted, and I might not have interested them with a set speech. Intelligent questions are the very life of an institute, as they are of an agricultural paper. In all my journalistic work I have valued the questions written to me for the paper far more than anything I would otherwise have written, for the queries indicate what the farmers are thinking about, and if answered fully, make the paper of far more value to its readers, since a question that one man asks is apt to be just what a hundred more would like to have answered, but failed to ask it.

There has been a great advance in farming in North Carolina, and this advance is largely due to the effective work done at the institutes. I noted that in some counties, especially in Guilford and Forsyth, they have generally abandoned the old practice of laying corn by with a turning plow, throwing a ridge of earth to it. Every field I noticed seemed to have been cultivated level. This is largely the result of the advice given at the institutes. But in the same section I noticed that they have failed to apply the same method to their tobacco crop and that most of them were wasting labor in pulling up a great hill with a hoe, the most expensive tool on the farm, and I tried to show them that the same level culture that they are applying to their corn is equally of benefit to tobacco.

There is still complaint of the scarcity of labor, though nearly all the farmers are using more labor than they need if they would use better implements. On the beautiful level flats near the Roanoke river, on the Norfolk line of the Atlantic Coast Line, I saw in one field five men with five mules, each pulling a turning plow, going four times in a row banking up the soil to the cotton, and of course damaging the roots, while a single pair of mules, driven by one hand riding on a two-row cultivator, would have done as much work as the five, and would have done it better for the crop.

And yet, in sections where great advance has been made-as about the city of Winston-Salem-there are men moon and the signs of the zodiac in planting, and one man even declared that manure spread on the wrong time of the moon will not have as good effect as the same manure spread when the moon was right.

During the last week of my trip I was over the eastern coast plain, in the trucking section. The greatest fault there seems to be that most of the growers are not willing to be truckers only, but farmers, with a little truck added, while the most successful growers are those who stick to their farming, or to their truck, as their sole business.

In Beaufort county a man took me out to his farm. and showed me a very fine field of cotton, which he told me was growing without any fertilizer. It was planted between rows of Irish potatoes, to which he had applied 1,500 pounds of high-grade commercial fertilizers, and of course there was food for both. He thought that he was doing a fine thing in getting that cotton after the potatoes. He had done it by making the potato rows five or six feet apart, and he said that he made fifty barrels of potatoes per acre. My own conclusion was that if he had planted the potatoes closer he might have gotten a hundred barrels, and this season he would have had more money from the extra crop of potatoes than he will get from the cotton, and would also have had a chance to have sown the land in peas after the potatoes, and by feeding these could have had humus-making material to greatly improve the land for the truck crops.

Truck farmers, especially, should practice stock feeding in some form, since on their rich lands they can grow, after the early truck has been marketed, a great abundance of forage for stock, and the feeding of this would give them manure they greatly need to make them more independent of the fertilizer mixer. And yet most of the North Carolina truckers endeavor to get farm crops after their early truck, and keep on buying fertilizers that do not add humus to their soils, prefering an immediate apparent profit to the permanent improvement of their soil and a greater crop production.

At one of these institutes I mentioned the fact that in North Carolina I had found that fall set cabbage plants fared better on the north side of the ridges or beds thrown up than on the south side, as is practiced further north. I had repeatedly tried planting on the south side, and had all my plants killed by cold in February, after they had been made tender by the growth started in warm spells, on the south side. One large grower objected, saying that the cold would kill them on the north side. It is hard to make people understand that it is not the degree of cold that hurts these plants, for they stand hard zero weather in Maryland, on the north side of Baltimore city, but the rupture of the cells of the plants by the sun striking them early in the morning, when frozen. In North Carolina there are usually spells of weather in January which will start the cabbages into growth. Then there is nearly always a sharp freeze about the middle of February, and the early morning sun striking those on the south side is almost certain to destroy them.

The most pleasant thing in my North Carolina trip has been the meeting of old friends, and to have men take my hand and say, "I owe my success in farming to hav-

ing followed your advice." It makes one feel that his life has not been in vain.

At Winston-Salem I was telling how I had given a formula to a tobacco grower in Granville county some years ago, and he had great success with it and got a fine price for his tobacco, and that, giving the same formula to another man, he wrote that he grew a very poor quality of tobacco. He bought the materials from a fertilizer manufacturer, and I asked him to send me his bill. I found that where I had prescribed high-grade sulphate of potash, the fertilizer man had sent him the same number of pounds of kainit, and thus not only gave him onefourth the amount of potash needed, but in a form that acted as a chloride, and damaged his tobacco, evidently designing to discourage him from home mixing. I had forgotten who this man was till a man in the audience spoke out and said that he was the man, and that in the bill they had put it "Sulphate of potash, iow grade," and then, in almost microscopic letters, had written "Kainit," and he failed to note this, and he then confessed that it was his own fault in allowing the fertilizer man to substitute what he knew would damage the quality of his tobacco.

And yet I found that nearly all the tobacco men in that section are using the 3-8-3 fertilizer for tobacco, in which the small percentage of potash is generally in the form of muriate, and a considerable amount of worthless "filler" is used. They have an excess of acid phosphate, or rather phosphhoric acid, and too small a percentage of potash for tobacco.

Ready mixed fertilizers, especially of the low grades, have a needless percentage of phosphoric acid, because it is the cheapest plant food in it, and the effect of an excess of phosphoric acid on tobacco is to make big-veined leaves, and thin, light material in the leaf between them.

Then in all the 2-8-2 fertilizers there is added fully a quarter of a ton of worthless sand to make the ton. And yet farmers pay for sacking this, freighting it and handling it, solely because these low-grade fertilizers are sold at the lowest price, and they think they are cheap, when, for the plant food in them, they are the highest priced of all fertilizers.

W. F. MASSEY.

CORN GROWING WITH FERTILIZER AND CRIMSON CLOVER.

Editor Southern Planter:

As per your request I submit the following table to show how I came out upon the cost of producing corn on poor, thin land the second year after raising clover (crimson) upon it, as set forth in the Planter, page 692, August number, 1908.

Just here I want to advise every subscriber to your valuable journal to always preserve every number of it for further reference, for indeed no number of it fails to have articles of vital interest to our farmers. I shall figure the cost of the work and fertilizers for an acre for two years, since by reference to my said article you will find that I only harvested one crop of corn. Since the price for labor varies in different localities, each reader must make due allowance for conditions as they exist in his particular section:

Breaking and harrowing one acre	\$2.00
Hauling manure	4.00
1,000 lbs. prepared lime, with 2 per ct. potash	6.00
800' lbs. acid phosphate	6.40
200 lbs. 2-8-2 fertilizer	2.20
200 lbs. Kainit	1.10
200 lbs. nitrate of soda	5.70
11 gallons clover seed	5.39
Mowing and hauling the clover	1.00
Plowing the corn four times	2.00
Harvesting the fodder and corn	5.0'0

Total cost for two years	\$40.7	'9
Credit.	•	
By pasturing first year	\$10.00	
By 1 1-2 tons clover second year	30.00	
By 1,000 lbs. fodder	10.00	
By 50 bushels corn	40.00	
Total income for two years	\$90'.00	
Profit for two years	49.2	29

\$90:00 \$90.00

Now, it will be observed that I have made no allowance for the rent of the land or the team, but I estimate the difference in the producing power of the land from 15 bushels corn to fifty bushels to balance these. The cost of the barnyard manure was only figured for the labor in hauling to and from the lot.

We hear such varied experiences as to clover, I will submit mine. For more than ten years I have been raising crimson clover, and always commence to feed it when it begins to bloom-given at night-just all that the team will eat. Then when the seed begins to form I mow, and let it remain as it falls from the mower until the following evening. If it is dry and warm, I haul to the barn and sprinkle plenty of salt upon each layer, but do not pack it. Should the weather be such that it is not ready to be put in the barn-that is well ventilated-I rake it up to remain in heaps until the following evening. Under no condition should it remain in the sun until it bleaches, nor should you ever fail to use salt. Salt cures and preserves it, as it does our pork. I have never had a horse made sick from it nor from feeding peanut vine hay, which should be fed at night only, if your team is at work. Some farmers feed too sparingly, and the result is the team eats the roots, which clog and often kill.

Clover heads should never be allowed to mature except for seed, for maturing the seed is very exhausting to the land. Clover raising is the panacea for returning the former fertility to our depleted soils, and no farmer should neglect it, even though it be necessary to mortgage the land to buy the seed. Again, many of our farmers do not sow the seed thick enough, and the result is large, coarse stalks. If you are in the cotton and peanut belt adopt the following plan, and if you do not raise good crops and keep your land in a fertile condition it will not be the fault of a kind Providence: Seed your land to clover, then to corn, and at the "laying by," to clover; then to cotton, and at the "laying by" to clover; then to pea-

nuts, and so on to corn again. This puts humus in your land every year except the year following your peanuts in other words, two years out of every three.

C. P. GRIZZARD.

Sussex county, Va.

ALFALFA GROWING IN VIRGINIA AND THE SOUTH. Editor Southern Planter:

I wish to express my pleasure in having met s) many of your people on the occasion of your last State Institute, at Richmond. Within the past few years I have addressed the people of nine States at similar meetings, but I feel that I do no injustice to any when I say that I found your people the most interesting and most interested of any that I have seen. They have much intelligence, much culture, enough energy, it seems to me, to transform Virginia within a compartively short time.

I was particularly impressed with the interest shown in the subject of alfalfa growing. Time was when I would not have willingly spoken on that subject in Virginia, for I would have felt that there were problems there not yet worked out, and too deep for me. Now the one remaining problem, it seems to me, is how to get people to believe the good news when they hear it, and to act on their belief. We know now how to make alfalia grow in the South, and in the North, too, for that matter.

Briefly let me state the three things that alfalfa demands:

First, soil that is not wet. Alfalfa can't stand a sodden, water-soaked soil. On Woodland Farm water was our chief enemy. We fought it with tile under-drains, laying mile after mile of them, till we had laid some eighteen miles or more of them. We will lay miles more, and will be at it as soon as we get this year's crops laid by and harvested. Very many Southern farmers are in better state than ever we were in this matter; they have soils pervious enough to let the water pass through and to let in the air. Knowing what we do now, we do not feel that we would have started to make an alfalfa farm where we did, here on Woodland Farm, in Ohio, for in our own neighborhood .are farms much better drained naturally, where we would have succeeded with less labor.

We know, too, that very many Virginia farmers have soils better drained naturally than ours are, even after laying all these miles of tile. But if you have a piece of land that is wet, spouty in a wet time soggy, don't try to grow much alfalfa on it till you drain it.

Next thing in importance to draining is lime. We have for years insisted on lime for alfalfa growing, but we now feel that we have not said it half loud enough. People have passed by this part of it as of minor importance. Lime is the very keystone of alfalfa culture. Alfalfa revels in lime, feeds upon lime, keeps its health upon a lime diet, feeds its bacteria on lime, and to be profitable and successful must have lime, and plenty of it.

It is strange to me now how long it took us to see that lime is the one thing that alfalfa absolutely worships and revels in. Looking back at our intimacy with the alfalfa plant, since 1886, we recall these facts. On our ranch in Utah we had spots of soil that were so impregnated with salts of lime that they were like mortar when wet and like rock when dry. No corn would grow in these spots, nor any other grain to advantage. When once we had established alfalfa there, it grew six feet high! On our own farm alfalfa varies much in tnrift and longevity, according to where it is established. On one clay hill, in especial, it is always very vigorous and productive; there the stand is always perfect after the rest of the field has begun to fail. There we got six tons of hay to the acre very often. And that hill is a limestone clay, filled with small pebbles of soft limestone, having to each square rod, I imagine, 500 lbs. of limestone particles and pebbles to the square rod of soil a foot deep! That would mean about forty tons of lime to the acre in the top foot of soil, and more of it down below.

In Mississippi I found a natural limestone region where alfalfa growing is much practiced, and where alfalfa is very easily established and makes much profit. The reason? Lime. It is all through the soil—a sort of rotten limestone—and it has made that soil black! How has it made the soil black? That is an interesting story, too. All limestone soils tend to become rich, and soils without lime tend to poverty. Why? Well, lime in the soil in some way that the chemist understands better, maybe, than I do, fixes fertility and prevents its leaching away. Richness gathers where there is lime in the soil. It rapidly disappears where there is not enough lime.

I could go for a long time giving other instances of the truth that alfalfa depends for its vigor upon lime. But I have a more wonderful thing yet to bring forward, and so far as I know, no one has presented this truth beside my brother, Joseph E. Wing, who has written of it in the Breeders' Gazette. Alfalfa is an exception to the plants commonly cultivated on the farm; it does not feel satisfied with a soil neutral, or with "enough lime" in it, but it wants a soil with "too much" lime in it. That is, it wants a soil so full of lime that it is alkaline, not acid. And there is very little danger, indeed, of getting too much lime in your soil for the good of the alfalfa plant.

All through the South there is a cry that "crab-grass and weeds choke my alfalfa." Or else that "My alfalfa will not become inoculated-it is weakly, sickly." We used to prescribe more manure for the sickly alfalfa, and with good faith, though we knew how scarce manure is on an ordinary Southern farm. For the crab-grass we prescribed more phosphorus, and with some success. Now we were really groping in the dark. Phosphorus helped, manure helped, but only too often manure hindered, too, by filling the land with more weeds and grass than it had in the beginning. We now know what we ought to have known all along-that what that land that bore unthrifty alfalfa, choked with weeds and grasses, needed was lime. Lime would make the alfalfa so vigorous that it would fight out the weeds and crab-grasses alone, aided only by the friendly mower.

We have seen in the South fields with heavy applications of lime—as much as four tons to the acre of fresh burned lime, or eight tons of ground limestone to the acre—give as fine, fresh, clean growth of alfalfa as ever we saw in Utah or Colorado, and right in the same fields strips where

the lime had not been applied, the alfalfa would be sickly, pale, crowded out by crab-grass and weeds.

The whole thing is plain now and easy, all but the details of working it out. Ninety-nine per cent. of the acres in the South need lime to make them as good as they ought to be for any crop, and especially for alfalfa. And when one is liming for alfalfa let him put it on as liberally as he dares, and then put on mcre! It is hard to get on too much lime for the alfalfa plant. We hope some day to know how much it will endure. We have now no record to show the limit. If we had access to ground and unburned limestone, such as some Virginia farmers have, we would not hesitate to put on six or eight tons to the acre, using manure spreaders to haul it and distribute it. We would even test strips with double this amount, confident that no harm would result. There are places in Virginia where men can get ground or powdered limestone, unburned, for the cost of hauling. There are mountains of the stuff at Saltville that I understand is given away by the manufacturers of alkalies there. It is the waste from the quarries, and is as good lime as there is for the soil. If I lived near Saltville I would have my teams hauling that crushed and powdered limestone to my fields during all their spare time. That soil needs lime, as much almost as the Tidewater section.

In much of the State it is a problem how to get lime cheap enough. When a good many farmers get together and ask for it, a way will open up; some one will put it on the market at a low price. In Ohio we get ground limestone put on the cars for \$1.00 to \$1.25 per ton. And we do not use a ton where we ought to use a thousand tons, but we are learning.

All through the Piedmont section, down on the red clays, all through the coast region, even in the Valley of Virginia, the need of lime is the paramount thing. And with enough lime alfalfa can grow with great profit. There is absolutely no doubt about that.

And, by the way, you have one man who is doing things so well, and on so large a scale, that you ought to watch him. I mean Mr. J. F. Jack, of Rappahannock. Mr. Jack began his preparations for farming in Virginia by the purchase of 400 tons of lime, which he put on about 180 acres of land for alfalfa. On that land he also grew cow peas and crimson clover, and turned under. Then he gave, good cultivation in midsummer, and put on about 400 lbs. to the acre of bone meal, and then 30 lbs. of alfalfa seed. I think he would have done as well with 20 pounds of alfalfa seen. This was last August, 1907. The result? A splendid stand of alfalfa, and a heavy cutting of hay, I believe, for each of four cuttings this season of 1908. And this month, August, Mr. Jack will sow an additional 160 acres. Thus, year by year, he hopes to increase his acreage till he has in 1,000 acres. He is making it a business proposition as much as when one goes after anything else purely mechanical. We say sandstone and cement, in certain proportions, makes artificial stone or concrete. Mr. Jack says, "lime, humus, phosphorus, alfalfa seed, make a meadow full of bloom and beauty, and yielding me four to eight tons of hay per acre. It costs me \$15.00 an acre to seed this alfalfa. I get \$15.00 per ton for my hay. I feel that there is chance of profit in it."

and what he is getting will be an astonishment to all Virginia and all the East.

Now, don't misunderstand me. I lay all this emphasis on lime because it is the foundation on which you must build with alfalfa. Given this lime, you can do much. You can add phosphorus, add humus, add good seed, add culture, and then success is as sure as that 2 and 2 and 2 and 2 make 8.

The climate of Virginia and farther South is better for alfalfa than the climate of Ohio or of Montana. And yet I have taken off six tons of hay from our best acres in Ohio in one year, and have seen 1,000 tons taken off of one 160-acre farm in Montana in one year. This, of course, was under irrigation. Now, get lime-get it for alfalfa, understand me. I advocate these large amounts of lime for no other crop. Put on two tons to the acre of freshly slaked lime; half that if you are of weak faith or light pocket-book; put on two to eight tons of ground limestone, not burned, if you can get it. Give phosphorus, give humus, give seed and inoculation, and omit "experimenting" with alfalfa. Grow alfalfa. Grow all you need of it. Grow after a time to sell. Be a manufacturer of soils ard condition. Of course you can afford it. It will repay you better than any other farming you ever did in the world.

WILLIS O. WING.

Woodland Farm, Mechanicsburg, Ohio, August 14.

GRASS GROWING.

Editor Southern Planter:

Whilst so much is being said and so much criticism on farm demonstration work, let me butt in and give my experience with hay. Mr. Sandy says 25 quarts of seed to the acre. Now, in my humble judgment, if a farmer goes to monkeying with that amount he will get left. That is too thick, unless his land is very rich. I have been raising hay for many years, and never use but nine quarts -seven of timothy and two of clean herd's grass. I sow both ways, and always get a good stand and plenty thick enough. I used to sow clover with the timothy, but the two do not ripen together, and the sapling clover lodges, the other will, if the land is rich; it does with me. Now, I have never plowed eight inches, etc., but I go six, then cultivate thoroughly; I try to use 500 pounds of pure raw bone, and more if I can-the more the better, and it will pay. Now, this may seem strange, but I follow my grass with grass. I have long since found out to cultivate a piece of land in corn after grass to clean the land of weeds is all a humbug. I have tried it many times; daisies, dock, wild carrot, and many other weeds will come.

You can cultivate for ten years, the next year they will be there, and as for wild onions, I believe they will grow on the sidewalks of Richmond, with no dirt on them. The way I get rid of weeds is to pull them up. I have heard timothy will exhaust your land; it will improve it, but do not forget pure raw bone every time. Now, one question and I am through. What does a farmer want with a demonstration? If he will take the Southern Planter, read it and follow instructions is all the demonstratior he needs; for what the editor of the Southern Planter does not know about farming is not worth knowing. Excuse my seeming flattery. Acid phosphate is the cheap-

est quick-paying fertilizer for corn I know. Come down, and let me 'demonstrate' at once on some corn growin; side by side, with and without.

L. H. CARLTON.

King William Co., Va.

CROP ROTATION.

Editor Southern Planter:

Referring again to the rotation plan outlined by me, and to Prof. Spillman's contribution in the August Planter relative to the same, I wish to beg pardon and say that I by no means intimated, or intended to intimate, the unaccredited use of my "thunder" by Prof. Spillman in his Georgetown address, as the Professor seems to have so interpreted my remarks in the July Planter.

My referring to Prof. Spillman's address was simply a citation of authority and endorsement of the plan.

I must confess, however, that though I have been in touch with agricultural literature and progress for several years, I have never before learned of any one recommending the exact plan as given by me, and it is certainly an enlightenment to hear Prof. Spillman say Georgia and Louisiana Experiment Stations have both practiced and advocated the plan. In my own case, I had to work out the rotation for myself, and am therefore thoroughly apprised of its worthiness on Southern farms.

As to my other plan of rotation in the Planter, and commented upon in the August number by Prof. Spillman, sugar cane (known also as ribbon cane, and botanically saccharum officinarium, was intended for those portions of the South, (South Carolina along the coastal belt to Texas.) Sorghums would probably serve well in other sections, but if the sugar cane could not be grown, and a substitute was wanted for forage purposes, I should not recommend any of the sorghums, as they are not in any sense as satisfactory as Teocinte.

ROSEMONT.

CLOVER GROWING IN VIRGINIA.

(The following correspondence on this subject will be of interest to our readers.—Ed.)

Department of Agriculture,

Washington, D. C.

Dear Sirs:

I am interested in farming in Nelson county, Va., and wish to ask if the Department can furnish a remedy that will prevent red clover dying out the first year after it is cut.

I have for a number of years been observing the cultivation of red clover as a hay plant in Virginia, and the conditions now appear to be about as follows:

It is usual to sow red clover with wheat in the fall, or with oats in the spring, or upon wheat that was seeded the previous fall, and if a stand of clover is gotten, it is cut for hay the year after the wheat or oats are cut.

Up to eight or ten years ago a stand of red clover would last for three or four years, and usually, if the weather was seasonable, could be cut twice a year—once in June and once in August.

When these conditions prevailed, red clover was one of the most valuable hay crops that was raised in Virginia. For the past five or six years, however, my experience has been that soon after cutting the first crop, the plants die entirely, and I have been unable to find a remedy to prevent their dying.

I have heard a good many causes suggested. One is that the land is deficient in lime, and that if, at the time of seeding, lime was liberally used, this would prevent the clover dying out.

Another suggestion is, that if the clover is cut before it goes to seed, it will prevent the dying out of the plant.

Another suggestion, still, is that the clover seed now generally sold in this State is raised in Germany, and is not acclimated, and that this causes the clover to die out after the first cutting.

In endeavoring to discover the real cause, I have used lime freely on my land, and have endeavored to cut the clover before it went to seed, and have also endeavored to get seed from clover raised in this State, but the fact still remains that red clover will now, in Virginia, yield only one crop, and dies out after the first cutting.

If there is any remedy for this, I would be glad to apply it.

I would not trouble the Department on this matter if it were not for the fact that this condition prevails generally throughout Virginia.

P. H. C. CABELL.

Mr. P. H. C. Cabell,

Shafer Building, Richmond, Va.

Dear Sir:

I have your letter of the 20th inst., describing the trouble you are having with red clover. The symptoms as you describe them, are typical with what is known as clover sickness, and which has prevented the successful growing of red clover through much of Virginia, Maryland, as well as other States for a number of years past. The cause of the trouble is very obscure; indeed, it is probable that there are a good many causes that have a bearing on it. The same difficulty is well known in Europe, where they find the clover-sick land must rest a period of five or seven years before it will again grow good clover. It is this trouble with red clover that is at the present time creating so much interest among farmers with other legumes, especially alfalfa. We are finding that alfalfa can be grown in much of Virginia perfectly if the proper methods are used. Other farmers are using crimson clover, or yetch, as a winter legume, and cow peas and soy beans as a summer legume. Of course, none of these crops quite take the place of red clover. The next thing to take its place is alsike clover, which is being quite extensively grown in Eastern Maryland. It is not quite as good as red clover, but still is the next real substitute. I am enclosing blue-slips in regard to these various crops, and would be pleased to hear from you further. I think it will be necessary for you to grow some other crop in place of the clover, and what this crop will be will depend largely upon the system of farming which you wish to pursue.

C. V. PIPER,

Agrostologist.

Red Clover.

Mr. C. V. Piper, Agrostologist,

Dear Sir:--I received your letter on the 25th ult. in regard to causes of red clover dying out, with enclosures therein stated, for which please accept my thanks.

We have tried in our section of Virginia growing peas as a land fertilizer with very good results, but timothy has largely taken the place of red clover as a hay crop.

I am making various experiments with red clover in the hope of discovering the cause of its dying out, and I am strongly of the opinion that the trouble lies with the seed we are able to get, from the fact that on new land which contains all the original elements and on the old land also which has been planted for years in clover, we have the same trouble with its dying out after the first cutting.

The farmers in Virginia are not prepared to save their own clover seed, but rely entirely upon buying from seed dealers. I am inclined to believe that the seed we get are not acclimated. For this reason they fail to produce the second crop.

We should be glad to know if the Department has made any seed tests with red clover.

P. H. C. CABELL.

Mr. P. H. C. Cabell, Richmond, Va.

Dear Sir:—Replying to your letter of July 1st, addressed to Mr. C. V. Piper, who is at present out of the city, I beg to state that our own Western grown clover seed seems to be better than the imported seed. The Chilian red clover is perhaps a little larger, but it is apt to be full of dodder. The Russian clover, we find, is more subject to blight than is the American grown seed. We have been very successful with different lots of red clover at the Arlington Experimental Farm, near Rosslyn, Va.

J. M. WESTGATE,

Assistant Agrostologist.

Department of Agriculture, Washington, D. C.

SOME FURTHER THOUGHTS ON THE FERTILIZER QUESTION.

Editor Southern Planter:

In taking up the consideration of the manurial repuirements of the oat crop we find, first, that oats analyze N. 2.06 per cent. Ph. A. .82 per cent. and Pot. .62 per cent. and the straw N. .62 per cent. Ph. A. .20 per cent. and Pot. 1.24 per cent. and taking the average yield for the State of Virginia at 18 bushels per acre we are confronted by the following proposition: For the grain at 32 pounds to the bushel 32 x 18 equals 576 pounds x 2.06 per cent equals 11.86 lbs. of N. 32 x 18 equals 576 pounds x 82 per cent. equals 4.72 per cent of Ph. A. 32 x 18 equals 576 pounds x 62 per cent equals 3.37 lbs. of Pot. and supposing we allowed 1,000 lbs. of straw per acre we have 1000 pounds of straw x .62 per cent equals 6.20 lbs of N. 1000 lbs. of straw x .20 per cent. equals 2.00 lbs. of Ph. A. 1000 lbs. of straw x 1.24 per cent. equals 12.40 lbs of Pot. by adding together the above figures we find that an oat crop of 18 bushels growing on 1000 pounds of straw per acre will use

18.	pounds	of	nitrogen	at	15c.		\$2.70	
6.7	6 pounds	s of	Phosphor	ic .	Acid	at 4¾0	.31	
15.9	7 pounds	s of	Potash at	t 5c			.79	
\mathbb{M}	laking a	tot	al of				\$3.80	

per acre for a complete fertilizer, which should, theoretically, increase our crop of oats 18 bushels per acre above the amount which would be produced without fertilizer.

This calls for practically an 18-07-.16 goods, if we consider it in percentages of 1,000 pounds, and were we to apply 100 pounds per acre, but as it is a combination so rich in nitrogen and potash as to be beyond the attainment of any known source of chemicals within reach of the fertilizer mixer, we will consider it as a $9\cdot3\frac{1}{2}\cdot8$ goods, in percentages of 2,000, and to be applied at the rate of 200 pounds per acre, and then find that it can be mixed as follows.

FORMULA.

1125 lbs. of 16 per cent. nitrate of soda equals 180 lbs of N. or 9 per cent; 500 lbs. of 14 per cent Acid Phosphate equals 70 pounds of Phosphorus or 3 1-2 per cent. 324 pounds of 48 per cent Muriate of Potash equals 160 lbs. of Potash or 8 per cent; 41 lbs of filler, making 2000 lbs. of mixed fertilizer analyzing 9-31/2-8, which should cost at wholesale figures, \$38, and applied at the rate of 200 lbs. to the acre, would cover ten acres at a cost of \$3.80 for each individual acre so treated. Should it oincrease the yield in proportion to its constituents, or 18 bu., worth at present prices 60c. a bu., the gross increase would be \$12.80, and the net profit, outside the labor of distribution and the extra cost of threshing and harvesting, \$9.00 per acre while the additional straw might be fairly set over against extra expenses and labor unaccounted for in the above estimate. It would seem from these figures that where nitrogen is supplied by the leguminous crop, and may therefore be dispensed with in the fertilizer, 50 pounds of 14% acid phosphate and 321/2 pounds of 48% muriate of potash form an ample application for the oat crop, and these chemicals can be supplied at a cost of $31\frac{1}{2}$ cents for the former and 80 cents for the latter or \$1.111/2 per acre.

If these figures are correct, and they are derived from tables of printed analyses in one of our standard works on agriculture, our farmers are very generally applying entirely too much phosphords and not enough nitrogen any potassium, for where acid phosphate alone is used, the above figures show that 500 pounds of 14% should suffice to produce 18 bushels per acre on ten acres of and; or, in other words, 50 pounds per acre, whereas 200 to 300' pounds is the more common amount used, enough to produce from 62 to 108 bushels per acre, if my figures are correct.

Now, it is well known that we are not getting such yields even from the best of our lands, and the query naturally arises as to the cause. As the problem presents itself to me, it has one of the following alternatives:

1st. Chemical analysis must fail to show the actual manurial requirements of the crop; or

2d. Nitrogen or potash rather than phosphoric acid large proportion of it become unavailable; or

3d. Acid phosphate must revert in the soil, and a very

must be the controlling factors in the production of the crop.

In the event of the first proopsition being correct all our scientific agriculture is built on a foundation of sand, and we must discard it and begin a new era, by accumulation of data based on carefully made field experiments in sufficient number to establish reliable averages.

Should we accept the second alternative, we must stop buying acid phosphate and look for some more available form in which we may get the element phosphorus.

It is only by adopting the third and last alternative that we can avoid upsetting the chemists' conclusions and when we look about us, and see the large yields of oats made from heavy applications of horse manure, which analyses .44-.17-.35, and consider how closely this will approximate the proportions of 18-7-16, for by multiplying the latter by $2\frac{1}{2}$ we get $45-17\frac{1}{2}-40$, we are influenced to form the opinion that our oat crops stand in greater need of nitrogen and potash than it does of phosphoric acid.

* * * * *

I have received, directly and indirectly, so many criticisms relative to my formula, as published in the May number of the Planter (page 426), that at the risk of becoming tedious, I will again revert to this subject.

Among others, and pechaps the most judicious, is a letter from one of the chemists of the Department of Agriculture in Washington, D. C., in which he takes me to task for what he justly calls a short cut in mathematics. To this charge I plead guilty, and will proceed to give my reasons.

In the first place, in order to get a paper to be at all acceptable to the average reader, one must try to make it interesting, and if we are to carefully work out each problem stating all mental processes by which we arrive at our conclusions, we at once become involved in long, unpunctuated sentences, and endless repetitions, which would make our work about as uninteresting and as difficult to follow as a chapter of legal documents or a collection of Acts of Congress. On the other hand, if we confine ourselves to general statements and make a plentiful use of synonims without laying down any premises, we do not convey a meaning sufficiently clear to answer the purposes of technical inquiry.

To steer a mean course between the two extremes, going just enough into detail to convey the idea without trespassing upon the time and patience of the reader, requires an amount of judgment aspired to by all, but possessed by so few that outside of Carlyle and Macauley, and possibly Sir Francis Galton, I can recall no writer who has attained it.

That I have erred on the side of brevity at the expense of clearness I admit, for the fact is fully proved by the numerous letters I have received, some taking issue as to facts and some asking for explanation of my meaning.

As to the suggestion that I should keep to the pounds-ton basis, stating how many actual pounds of nitrogen phosphoric acid and potash should be applied to each acre, as a simpler way of attacking this problem than the percentage basis, I reply that a farmer who desires to compare the price of his home mixed fertilizer with the ready mixed article, must either get the percentage of his own product or reduce the percentage of the ready mixed goods to pounds in the ton before he can make any comparison of

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values, and as the only conceivable reason for home mixing is the cheapening of the product, it follows that a knowledge of percentage is a necessary evil to the home mixer; and furthermore, as he will mix only one lot of chemicals and desire to compare it with probably a dozen different brands of like anaysis but dissimilar price, it will evidently be less trouble for him to bring his one mixture to per cent. of the ton rather than bring the many others which may differ slightly enough to require many sets of figures, to the pounds in the ton basis.

Really the proper thing to do in order to simplify the whole situation is to require the maaufacturer to print on each bag sold the actual contents in pounds and ounces, but as long as we farmers continue to fill our Legislature with lawyers and professional politicians, we must expect to find the political and legal interests of the State better taken care of than the agricultural.

Mathews County, Va.

PERCIVAL HICKS.

COMMENTS ON AUGUST ISSUE.

Editor Southern Planter:

Crop Rotation.

Prof. Spillman is right as to the fact that the rotation suggested has been advised for many years by many persons, and certainly by myself. He is right, too, in 'saying that a greater variety of rotations can be used in the South than in the North, since we have a team like peas and crimson clover to work togethe:, summer and winter. And the shorter in reason, to include the crops, the rotation may be the better, so that the legumes come in frequently on the land and furnish the finest of forage to make ma-Lare to return for humus-making in the soil. And this restoration of the humus that was there in the virgin condition of the soil is the main object of any judicious rotation.

Conservation of Plant Food.

The American people have certainly been wasteful of the natural resources of their country, both in the depletion of the virgin fertility of the soil and the ruthless destruction of the forests, which, if they had been properly lumbered, would have continued to supply us indefinitely, instead of our being now on the verge of a lumber famine. But of all people, the Southern farmers have been the most wasteful, and are still so. They allow millions of dollars' worth of nitrogen and ash elements to be carried away from their soil annually in the cotton seed meal, for the seed is the only part of the cotton that does draw on the soil, the cotton fibre coming almost entirely from the air. And yet all over the South we see men applying a little 200 pounds of a 2-8-2 fertilizer for cotton on land from which they have sold off ten times as much nitrogen in the seed, when if they farmed right, they need never to buy an ounce of nitrogen in any form. The greater number of farmers will depend on low grade fertilizers, like the 2-8-2, which is at least one-fourth filler, and imagine that it is cheap because lower in price than a better article. In some parts of Eastern North Carolina intelligent farmers have been insisting for years that phosphoric acid gives them no results in cotton or tobacco. There is no doubt that in the low grade fertilizers there is too high a percentage of phosphoric acid, as compared with the other ingredients, mainly who cultivated the soil were planters-planting a piece of

because it is the cheapest thing in the mixture. The tobacco growers insist that those who use but 2% of phosphoric acid make finer tobacco than those who use the 8% goods. There is no doubt, too, that on the soils of Eastern North Carolina phosphoric acid will not have its due effect unless accompanied by a due percentage of potash, and for the tobacco grower the lower grades of mixed goods have not more than one-fifth the amount of potash they should have for tobacco.

Feeding Crimson Clover.

Iwould like to adu to what I said last month in regard to feeding the hay made from crimson clover, that those here who are feeding it in connection with other roughage have no trouble with it. It seems that the danger lies in using the clover as the sole roughage. Feeding it in connection with corn fodder or oat straw seems to prevent the balling of the hairs in the intestines of the horse. The deaths here have been exclusively where the clover has been fed to the exclusion of coarser material, and were fed on early cut hay, too.

Fertilizers For Wheat.

I would like to say to Mr. Hicks that the men who are making the largest crops of wheat in Maryland are the men who have bought no nitrogen in twenty years. Some years ago the late Samuel T. Earle, of Queen Anne's county, told me, when sitting by his fireside, that for the past twenty years he had averaged 40 bushels of wheat per acre, and during that time had bought no fertilizer except plain acid phosphate. Doubtless the lack of nitrogen operates against many farmers in Tidewater Virginia because they do not grow the legumes often enough on the land. Some farmers in Kent county use a mixture of 10 per cent. phosphoric acid and 5 per cent. potash. But to get this from 16 per cent. phosphate and muriate of potash would require a filler or a low grade acid phosphate, to which the filler has been already added. But it is a fact that 80 per cent. of the fertilizers sold in those upper counties of the Eastern Shore of Maryland for wheat, contain no nitrogen whatver, and yet there is no section of the country which grows larger crops of wheat. I have insisted for thirty years, and still believe, that a farmer whose interest is in grain or cotton, need never buy an ounce of nitrogen in any form, if he farms right, growing legume forage and feeding stock.

Plowing Deeply.

I would say to Mr. Rand that I have plowed the Piedmont red clay in Virginia much deeper than it ever was plowed, and followed the plow with a subsoiler, and got a stand of clover and grass that was the wonder of the neighborhood, for the field, when plowed, had only poverty grass on it-"hens'-nest grass," as the darkeys call it. I have plowed and subsoiled the red hills deeply and got better crops of corn by reason of the deep breaking. Turned up raw in the spring, the red clay may do temporary hurt, but plowed in the fall and subjected to the winter frost, it gives very different results. I have grown a fine sod on this red clay when graded off fifteen feet perpendicularly, to make a level area for buildings, and 1 have an abiding faith in the red clay down to the fast rock.

Farmer and Planter.

The old term that grew up in the South, when the men

THE SOUTHERN PLANTER

land till run down, and then letting it grow up in old-field pines, while another piece was planted and run down. But the old planting system, with its abundance of human labor, made the conditions that we find to-day in too many places, and necessitates farming, or cultivating, to restore the soil to its pristine fertility a necessity. With the passing away of the old labor system, we must become tarmers, land improvers rather than wasters, as before. The old system ran the land down to the dead skeleton of sand and clay; we must farm to restore the humus, the life of the soil, and while the "Southern Planter" may retain its old familiar name, it, too, has become the advocate and organ of farmers, and not planters. A new era has dawned and old things must be done away with, and all work' for better practices and greater success.

Farm Horses.

I have been roasted for wanting some thoroughbred blood in a farm horse, and am glad to be backed by so copetent an authority as Capt. Hancock, as quoted by M. Hunter.

W. F. MASSEY.

GRASS SEEDING.

Editor Southern Planter:

The results I have gotten during the past three years from sowing grass seed along with cow peas have been so satisfactory that I feel I shall be doing good to all interested by giving details.

I have been seeding, during first two weeks in June, both the cow peas and grass seed at the same time-once going over the ground, with wheat drill. Have put in five pecks of peas and the usual quantity of grass seed, with grass seeding attachment. The grass has invariably made a perfect "catch," and has lived under the peas and flourished far better than if it had been sown alone. The pea hay has been cut off in September, and the grass was then well rooted and matted on the ground. The cultivation of the land in June sprouted the surface weed seed, and the weeds were necessarily removed from the land along with the pea hay. Before frost and freezes came the grass had such good root that it stood the winter better, and in the spring the growth of grass was much earlier. The strength and root of the grass tended to give it a running start on weeds. The results have uniformly shown cleaner hay and a larger yield than ever before harvested from the same fields.

In June, 1907, I sowed one-half of a certain field in this way, and in September following I sowed the other half of this field in rye and grass. The same fertilizer was used in both instances, i. e., two hundred pounds each of raw bone and 14% acid phosphate. I cut this season, early in July, about two tons per acre of very clean hay from the portion sown with peas. The portion sown in September with rye will not yield any hay until next year (1909.) Thus I saved one working of the land, got one year's crop of grass extra, and made hay of extra clean quality by sowing the peas and grass simultaneously in June. For the three months period from June to September, the grass gave me one year's extra growth over the result from seeding rye and grass in September.

method last year. They have all reported the system as in every way satisfactory.

W. T. TOWNES.

Culpeper Co., Va.

CONCRETE SILOS.

Editor Southern Planter:

Silos not only cost money, but very few farmers know how to properly build them. Ready-made stave silos may be bought, and are good as long as they last. Sometimes a storm blows them over, and it is some little trouble to keep them in order and in repair.

The most lasting and easiest built silos are made of concrete cast in steel forms. These forms can be used over and over again. They consist of steel bands, each two or three feet wide.

Three steel bands, each $2\frac{1}{2}$ feet wide for the inside, and three outer bands of the same width make a form $7\frac{1}{2}$ feet high. The outer bands are larger, so that there is a space of six inches between the inner and the outer form. This space is filled with concrete, into which iron rods are imbedded upright, 18 to 24 inches apart, and heavy wires are laid every eight inches horizontally as the building goes up.

When this form is full and completely set, the lower band is loosened and put on top of the upper, and the filling in of concrete goes on. Each band has a rim into which the next band fits. The bands are made in four or six sections, held together with steel clips so they can readily be taken apart.

In some States such forms can be rented, but I have seen none advertised in the Southern Planter. For a 14-foot silo the bands would probably cost less than \$200. No farmer cares to invest that much in forms that he would use but once in a lifetime, but if ten farmers will join in the purchase, the cost to each would be small and when each member has built his silo the forms might be advertised in the Southern Planter for rent or for sale, and thus most or all of the first cost would be made up again.

This seems to me the most practical way. It reduces the cost to each, because there are ten users to begin with, and as the neighbors see these silos or hear of them, there will be more demand than if one farmer had bought the forms for himself.

A round silo, 14 feet wide and 30 feet high, will hold 90 tons of silage, which can be grown on from 7 to 12 acres, and will feed from 25 to 50 cattle. Where the gravel is right on the place and the farmer does the work, the cost is probably less than \$200.00. It will last a lifetime. If you have a windmill or hydraulic ram, or other power for pumping water, you can put your tank or reservoit on top of your concrete silo, and, if you wish, you can make the reservoir or tank of concrete as well, while you al building the silo.

If farmers interested in this will write to the editor of the Southern Planter, he will probably gladly assist i forming such clubs. Bids should be obtained from a number of structural iron works to get the lowest prices.

On page 658, issue of August 15, 1908, of The Rural New Yorker, a Missouri farmer reports:

sult from seeding rye and grass in September. "A woven wire fence is the best reinforcement for ce-I personally advised many of my friends to try this ment silo. I have just built one, 11 x 23 feet high, six inch walls, reinforced from ground up (with wire), plastered inside with one part cement with two sand, and given a coat of tar. Walls one part cement, nine sand and gravel. Total cost, \$48.00."

ALFALFA GROWING IN THE SOUTH.

(Written from Auburn, Ala., July, 1908, by Mr. Joseph Wing.)

But alfalfa they can grow here, even on these sandy red ridges. How? Why, by liming heavily. We used to think that alfalfa in the South required a certain time of sowing, required this, that and the other thing. It is yet true that there is a right and wrong way to sow it, but we had not guessed the one thing that made success certain, and without which all the elaborate preparations in the world resulted in failure. We had not learned then that lime is the key that unlocks the knotty problem. True, we had said timidly "lime," but we had not said how much. A little lime, we had said. Now we know that alfalfa wants -not a little lime, not even enough lime, but "too much lime," as one enthusiastic lime advocate expressed it. just put on "too much lime," and sow alfalfa seed at almost any time of the year, and you will get alfalfa. Of course, if the land is also made rich you will get bigger alfalfa. But with "too much lime" you get alfalfa and no grasses, no weeds to trouble, that is the point. Without the lime you get nothing-the alfalfa bacteria starves the al falfa becomes sickly, failure results. We did think that fall seeding was the essential thing. We still think August or September seeding best for the South, but Mr. Jones, over on the lime rock, sows in March, in April, in May, in July or August or September, and gets good stands in any month.

So we let our joy at having the problem solved at last swallow up our chagrin at having guessed wrongly for so long a time. We are glad to have the thing solved at last, and to know finally the secret of successful alfalfa culture in the South. It is, first, land not wet; next, land filled with lime; then manure or fertilizers to make the land rich; then seed, preferably in the fall, in a good seedbed, and the result is certain to be alfalfa. And how much lime? No one knows that definitely as yet. It seems that four tons of fresh burned lime to the acre is none too much and eight or ten tons of ground limestone. But land that is worth now \$25 per acre may by the application of this lime and fertilizer be made to yield six crops of alfalfa hay a year ,worth here to feed to the plantation stock at least \$15 per ton. Say four tons to the acre only, yielding \$60, and with no need of sowing next year. So, little by little, the problems down here are being solved. Let me repeat again, to stop the interminable flow of questions: If your field of alfalfa is being devoured by crab-grass, it probably needs lime, much lime, and also phosphorus. With enough lime and phosphorus in the soil alfalfa will be free from crab-grass and weeds. I hope to see the day when a million tons of lime will be used in a year in this Southland.-Breeders' Gazette.

THE HAY CROP IN THE HUDSON VALLEY, N. Y. Editor Southern Planter:

For two hundred years of more the Hudson river valley has been relied upon to supply the New York hay market.

In this entire district very little live stock is kept, and not only hay, but large amounts of potatoes, oats, rye, straw, as well as grain are sold. Very little fertilizer is used, and little attention is given to a clover rotation, as the buyers discriminate against clover hay.

Is it any wonder that under such abuse for two hundred years the crops should begin to deterirate, until at haying time, the fields are a beautiful sight, one great flower garden, covered with white and yellow daisies and other weeds, and in a few cases with the red bloom of the dreaded devil's paint brush?

Is it any wonder that the timothy runs out rapidly, and that a large part of the so-called hay will not pay for the grease used on the mower, let alone wages and rent on from one to five hundred dollar land, which the people will proudly tell you it is worth? If the land is worth this amount, it stands to reason that it must be made to produce the maximum amount of crop every year, or it is a losing speculation.

How can this be done?

One way is to use clover in a short rotation—one year clover, one year a hoed crop, one year grain, seeded to clover, using a liberal amount of potash and phosphoric acid to ensure a clover crop. But this is a practice the people do not take kindly to. They have been growing hay ever since the Dutch farmers settled on the river, and they have no notion of changing. Even if they did, they do not keep sufficient stock to eat the clover, and clover hay is discriminated against by the city buyer, who does not know its value.

Under these circumstances the more progressive farmers are experimenting to see if, considering the high price of hay, they cannot use commercial fertilizers to keep up the yield of the meadows at a profit. Wherever judgment has been used in the selection of the fertilizer, good results have been obtained.

At New Paltz I saw a field, part of which had been fertilized, on which there was easily three times the yield that was on the unfertilized. The owner claimed that it was the most profitable investment that he had ever made.

Another field which I had the pleasure of inspecting at Coxackie, was an even solid mass of timothy, while on the opposite side of the fence was a field which had been seeded a year later and upon which no fertilizer had been used. It was full of daisies, with a weak growth of timothy.

In both these cases the daisies were still in the hay, but the fertilizer stimulated the growth of timothy so that it almost smothered the daisies, and they made such a weak growth that they could hardly be noticed, while in the unfertilized plots the bulk of the crop would be weeds. So we see that the fertilizer not only increased the yield, but also would double the value of the hay per ton.

What shall they use

Any good standard fertilizer, such as 4-8-7, or 4-6-10, or 6-7-7 will give good results, if applied at the rate of from 300 to 600 pounds per acre. Probably a better way would be to apply 150 pounds of potash and 500 pounds acid phosphate early in the spring or in the fall, so that it will be wellwashed in around the roots of the grass, and then apply 150 to 200 pounds of nitrate of soda per acre just when the grass is beginning to grow.

Trucking, Garden and Orchard.

WORK FOR THE MONTH.

The work of harvesting, storing and marketing the crops as they mature should have constant attention. Do not let products become overripe or overgrown before they are gathered, but yet let them be so fully matured that when stored they will not shrivel, and when shipped they will come on the market in perfection for eating. Gather only when dry, and keep in a cool, airy shed until shipped, or until they are cooled off for storing. In handling the apple crop for the market we are satisfied that much more money could be realized if the finest fruit was put up in small baskets or boxes holding, say half a bushel each. These would be largely bought by small families who only want a supply for quick consumption, and who would readily give a higher price for a package they can carry along with them. Do not send defective or inferior fruit to the market, but keep at home and preserve or dry for family use. When shipped these bring only at least about enough to pay for shipping and packages. Carefully handled at home they will make as good preserves or dried fruit as the best.

Irish and sweet potatoes should be dug as they mature. Do not let them stop in the ground after they are ripe. They will never keep so well as when dug as soon as ripe and carefully dried out. The injured and diseased tubers should be carefully sorted out as soon as possible after digging. If left with the sound ones they soon spread disease amongst them. Dig only when the ground is dry, and when the tubers can be gathered free from soil sticking to them. They should be allowed to dry off on the field for a few hours if the sun is not too hot, and then be spread in a dry, airy shed, not too thickly, so that they will complete the drying. Irish potatoes may be kept stored in a dry frost-proof cellar, covered with straw to exclude the light, and keep an even temperature, or they may be made into pies or kilns on high dry land, and be covered with straw and boards to keep out the wet until they have passed through the sweat, and then the pie or kiln should be covered with soil to the depth of six or eight inches to keep out frost and preserve an equable temperature. Sweet potatoes should be stored in a root cellar, where a temperature of fifty degrees can be maintained. They may be there kept in ventilated bins or boxes, or if this provision cannot be provided they may be packed away in pine tags, and covered with dry sand sufficient to keep them warm and dry. Onions should be stored on slatted shelves in an airy, dry shed. They can stand a low temperature without injury, and even if slightly frozen will thaw out all right if kept in the dark. Beets and carrots should be stored in dry sand in a cellar.

Kale and spinach seed should be sowed in the field where the crop is to mature. Sow in rows wide enough to admit of cultivation.

plants to set out in the field in November. When the plants are large enough to handle prick them out in beds to grow on until wanted to plant out. Don't make these beds too rich, as what is wanted is short, stocky plants.

Cabbage plants raised for the fall crops should be set out in rich, well prepared land, and they should be pushed on by frequent cultivation and top dressings of nitrate of soda.

Potato-onion sets may be set out this month and next. They make the earliest green onions for the market and ripe bulbs, which will be ready before the spring-sown ones. Set in rows 2-feet, 6 inches apart and six inches apart in the rows, and make the soil fine and rich.

Lettuce seed should be sowed for raising plants to set in the frames for the winter and early spring crop. As soon as the plants are large enough to handle they should be pricked out in rows four inches apart in the frames for the first winter crop. The old soil in the frames should be removed and new, sweet, well prepared soil be substituted. Make the soil moderately rich with manure and a complete fertilizer. Later plantings may be made from the seed beds for succession crops. Give plenty of air to the frames so long as the weather keeps mild.

Continue to set out strawberry plants on well prepared land, made moderately rich with manure and fertilizer.

THE COMING APPLE CROP IN VIRGINIA.

Editor Southern Planter:

As the apple crop approaches maturity every orchardist begins to think how he can dispose of his crop to the best advantage. While the average crop in the State is quite short, yet in some sections, notably in the Crozet-Greenwood section of Albemarle, and thence northward into Rappahannock, quite good crops are reported. In addition all reports agree that the apples are smoother and finer than usual; hence it may be expected that though the average of the State may be short, yet the quality is much superior to ordinary. This may be due in a great degree to the better care and methods of orchard management that are now prevailing in a very marked way. What, therefore remains to be done, is to make the most of the crop by putting them on the market in the most attractive form. From now until picking time, the greatest danger is of Bitter Rot. This destructive fungus disease has made its appearance, and the wide-awake orchardists are busy trying to check it by spraying. All through this section of Albemarle, men, teams and wagons whitened with spray, are much in evidence. Merchants report a bigger demand for Blue-Stone than ever before. Wherever orchardists have not sprayed against Bitter Rot, they would be well advised to lose no time in doing so; while the treatment does not save such apples as are already infected, yet it checks further infection, and has come to Cabbage seed should be sowed in frames or beds to raise be regarded in the light of an insurance. The next, and

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last, process, is the picking and packing of the crop. Here unfortunately, many men fail to attain the best results, and there has been much complaint by buyers of bad packing, and bruised off-grade apples placed in the barrels. In order to acquire the confidence of the buyers members of the State Horticultural Society determined to organize packing associations, who would guarantee the contents of the packages put up by them to be up to the grade marked on the package with the associations' packing label. So far, two of these associations have been organized. The Virginia Growers' and Packers' Association, working mostly in the Piedmont district, of which Mr. R. E. Wayland, of Crozet, Albemarle county, is secretary, and The Shenandoah Valley Packers' Association, of which Mr. J. Lucien Moo maw, of Cloverdale, is secretary. Orchardists interested can obtain all particulars on application to these gentlemen, and the sooner they do so the better. We must establish confidence in Virginia apples being packed to grades marked, the method so often used, of facing up with first-class apples, and stuffing with a lot of wormy or defective fruit should be relegated to days of the past so far as Virginia apples are concerned, until this is the case, confidence cannot be restored among the buyers.

WALTER WHATELY, Secy & Treas. Va. State Hort. Society. Albemarle Co., Va.

THE EXHIBITS OF FRUIT AT THE STATE FAIR. Editor Southern Planter;

Before your October issue is in the hands of subscribers, apples will be picked, and the State Fair on. Permit me to remind orchardists throughout the State that the Virginia State Horticultural Society is making every effort to display a really creditable collection of Virginia fruits and vegetables at both the Interstate Fair at Lynchburg, and the State Fair at Richmond; we propose to send this exhibit on to the State fairs in North and South Carolina. In order to have the exhibits named we must have the cooperation of fruit growers to select and send specimens to make up the exhibit. I made full reference to the arrangement in your last month's issue, any orchardist can refer back to that letter. We also offer a fine premium list for an exhibit of fruit at the annual meeting of the Society in Lynchburg, January 6, 7, 8, 1909, for which specimens must, of course, be selected while handling the apple crop, and then put in cold storage. I hope to have the premium list ready for distribution in a few days.

WALTER WHATELY,

Secy. & Treas. Va. State Hort. Society. Albemarle Co., Va.

THE HIGHLAND (NEW YORK) FRUIT BELT. Editor Southern Planter;

One of the most interesting fruit districts in the United States is in New York, on the west side of the Hudson river, extending from Middle Hope, nearly as far as Kingston, on the north, but centering around the thriving town of Highland.

Here, I was proudly told by one of the old residents, who had done his part in building up this great industry, is the only place in the world where ten varieties of fruit will grow to perfection. Other places may grow one or two varieties at their best, but here all do especially well.

The season is commenced by the strawberry, then follow in rotation, raspberries, blackberries, currants, gooseberries, peaches, pears, plums, grapes and apples, which certainly is an exceptional record for one locality.

The soil is thin, stony and rocky, derived from an underlying slate rock, tilted up almost perpendicular and badly shattered by some violent convulsion in the early history of the world. The cracks in the rock give the best of natural underdrainage, which disposes of all surplus water, while at the same time acting as a sponge, to hold the water from the summer showers, preventing the water from running off and keeping it for the future use of the plants.

Intensive cultivation is the rule, and the custom is to train the grapes high, plant currant bushes under the grapes, and then strawberries between the rows. Or your will see apple trees with peaches between, and the space between them filled with raspberries or blackberries. Nowhere have I seen so large a number of fruit plants of different kinds to the acre.

This intensive cultivation, as would be expected, requires large amounts of plant food. Owing to the fact that the great number of plants prevent a general use of cover crops, manure has been found to be one of the best fertilizers, as it supplies not only the necessary plant food, but also the humus. This manure is obtained in large quantities from New York, and has been used very generally in the past, but it was soon found to be an unbalanced fertilizer. The strawberries became soft and pale in color, with frequent complaints about their bad condition from the New York commission men.

While the peaches and other fruits decreased in yield, they also lost their color. This set the growers thinking, and they began to use commercial fertilizers, especially those rich in phosphoric acid and potash, with the result that the wood ripened up well in the fall, and both the yield and the quality of the fruit was good. The strawberries were of high color and shipped well; in fact, one strawberry buyer said that where a farmer uses plenty of a properly balanced fertilizer, he need not fear the receipt of telegrams saying that his berries had arrived in poor condition.

The same conditions were found in the Norfolk (Va.) trucking district, where the growers will scarcely use manure at all, claiming that it gives a soft berry that will not ship well, but use large quantities of a fertilizer, averaging about 2-8-10.

This analysis was found to be a favorite with the Highland growers. While those who used large quantities of manure used a 10-8 goods (that is, a fertilizer containing ten per cent. acid, and eight per cent. potash), thinking that they obtained sufficient nitrogen from the manure. In fact, the analysis of the average manure which will contain ten pounds of nitrogen, five pounds phosphoric acid, and ten pounds of potash, shows that there is an excess of nitrogen which can be balanced by adding about twenty-five pounds of potash, and eighty-five of phosphoric acid, or 125 pounds of 10-8 goods to each load of manure.

The most successful fruit growers use large quantities, from 1,000 to 1,500 per acre of 2-8-10, or 10-8 goods, or its equivalent, made from a mixture of sulphate of potash, bone meal and acid phosphate.

G. FRED. MARSH.

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Live Stock and Dairy.

FEEDING CORN AND BY-PRODUCTS.

(Continued from August issue.)

Editor Southern Planter:

Corn stover, as already indicated, is simply the stalk without the ear. Stover may be fed whole, cut or shredded, and at the outset it is well to emphasize the fact that the feeding value of stover is, as a rule, grievously underestimated, and hence one of the most important and desirable forms of roughness available on the average farm is neglected, and, in many instances, entirely wasted. Careful examination by a number of experiment stations has revealed the fact that from one-half to two-thirds of the nutrients of the corn plant are found in the grain and the balance in the stover, and it will be proper to consider in this connection the distribution of the nutrients, for public opinion to the contrary, a very considerable portion of the nutrients are contained in the butts, and though these are probably not as easily masticated or digested as the top, blades, shucks, etc., when shredded a considerable percentage of the basal part of the stalks is consumed. It is important, therefore, in saving the fodder to secure first of all the leaves, blades, shucks and the top part of the stalk, but none of it should be wasted, and it is entirely a mistake to either top or pull fodder, when the same amount of labor would practically insure the saving of the entire crop, and the digestion and assimilation of a very much larger amount of the total nutrients produced than where only the top fodder is fed.

On the other hand, it will not pay to run stover through a cutting box, or shredder, simply to induce the animals to eat a larger per cent. of the butts, but as modern machinery has made it possible to shuck and shred corn at the same time with a comparatively small number of laborers, it puts an entirely different phase on this proposition, and wherever it is possible to shred or cut the fodder, it is certainly advisable to do so because the animals will undoubtedly eat a larger per cent. of it, and the waste is in excellent condition to use as bedding, making, in fact, a very good absorbent, and there will be no difficulty in distributing the resulting manure with the spreader.

As to the relative merits of cut and shredded fodder, there is much diversity of opinion. Cutting the fodder comparatively short has been a satisfactory practice with us, and we have had few animals develop sore mouths, but this is possibly due to the fact that we have never fed exclusively on cut fodder. In our experience using one cutting knife and one shredder head has given more satisfactory results than either cutting or shredding alone. One material advantage in using cut, or shredded fodder, is the fact that it can be moistened with water, and have either concentrates or roots, both, if desirable, mixed in with it. A mixture of this kind left in a pile for a day or two will soften down very materially, and will be eaten with great relish by live-stock. In other words, the palatability of cut or shredded stover can be materially increased; whereas, it would be difficult to effect the consumption of the whole fodder. Some have thought by pulling the ears and feeding the stover and grain separately were fed silage as a roughness for 180 days, and made an

that a much larger gain would be obtained. Experimental data do not bear out this belief. A more intelligent conception of the relative merits of corn fodder and stover in its various forms, as compared with timothy hay, will be obtaine, byt examining the appended table.

PERCENTAGE	COMPOSITION	OF THE	CORN PLANT.
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NAME.	Water.	Ash.	Protein.	Crude Fiber.	Nitrogen Free Extract.	Fat.
Corn fodder Corn stover Corn husks Corn haves Corn stalks Timothy hay	30.0	$ \begin{array}{r} 2.7 \\ 3.4 \\ 1.8 \\ 5.5 \\ \dots \\ 4.4 \end{array} $	4.5 3.8 2.5 6.0 5.9	14.3 19.7 15.8 21.4 29.0	34.7 31.5 28.3 35.7 45.0	1.6 1.1 0.7 1.4 2.5

That corn stover hasa higher feeding value than is generally accorded it is shown by the following data, obtained in a feeding trial with dairy cows at the Virginia Experiment Station. Twenty-four animals were fed in this test, twelve of them receiving hay and twelve of them stover. Those receiving timothy hay made a gallon of milk at a cost of 5.26 cents, and a pound of butter at a cost of 12.66 cents. Those receiving stover made a gallon of milk at a cost of 5.98 cents, and a pound of butter at a cost of 13.96 cents, which indicates that stover as a roughness had practically the same feeding value as the hay. This is a very important consideration, for there are many places where timothy hay cannot be grown satisfactorily, and where thousands of tons of corn stover are annually allowed to go to waste because it is not believed it can be utilized profitably in feeding dairy cattle. In fact, the value of roughness in the maintenance and nutrition of live-stock has been greatly underestimated because in the past concentrates have been compartively cheap, but now, that they are annually becoming more and more costly, the farmer must devise a means of reducing the cost of making milk and butter. By the proper utilization of cheap forms of roughness, such as corn fodder, which have hitherto been frequently neglected, he can achieve the desired end, and at the same time leave himself a considerable quantity of high-priced hay to dispose of, and for which he can find a ready sale at remunerative prices.

DIGESTIBLE NUTRIENTS IN THE CORN PLANT.

AME.	Dry Matter, Per ton.	Protein.	Digestible Mat- ter Per ton, Carbohydrates.	Fat.
Corn fodder (field cured).	1156.0	50.0	692.0	24.0
Corn stover (field cured).	1190.0	34.0	648.0	14.0
Timothy hay	1736.0	56.	868.0	28.0

The value of stover as a roughness for beef cattle was brought out nicely by the following trial, made at the Virginia Experiment Station, where twenty head of cattle average daily gain of 1.46 pounds. Twenty head of cattle fed shredded stover r. 's an average daily gain in the same time of .97 pounds. Twen ty head of cattle fed mixed hay, timothy predominaling, made an average daily gain og 1.10 pounds. From a financial viewpoint these experiments indicated that the silage-fed cattle would have to be sold on a margin of 1.25 cents, the stover-fed cattle on a margin of 1.5 cents, and the hay-fed cattle on a margin of 2 cents, to enable a farmer to make a fair 1 jofit on handling and feeding them. The results naturally indicate the superiority of silage as a roughness for cattle, but they likewise show that stover was a more economical roughness than mixed hay, owing largely to the difference in cost price of the two, and to the fact that nearly as large gains were made by the cattle fed stover as those receiving hay.

Is not this evidence worthy of consideration, and does it not show very clearly that a good quality of stover made and preserved can, as a rule, be made to take the place of many more expensive forms of roughness which are now commonly fed? If the stover were cut at the right time and properly shocked, cured and handled, it certainly would contain a higher per cent. of digestible nutrients than it frequently does, owing to mismanagement and neglect, to which it is subjected on the average farm. Surely, this is a matter of sufficient economic importance to indelibly impress itself on the minds of all thoughtful farmers, and make them give more attention to that part of the corn stalk which they have so grievously neglected in the past by reason of a failure to appreciate its true feeding value.

In this connection it will be proper to quote from an experiment made by the writer which shows that stover, when fed with a leguminous hay will give better results than indicated above.

FEEDING	STOVER	TO BEEF	CATTLE.
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RATION.	Grain per Head per Day-lbs.	Гоод Сопсеп.	Consumed Rough.	Cost lb. of gain- cts.
Corn Stover, Cotton Seed Meal and Bran, Corn Meal Corn Stover, Pea Hay, Corn Meal	1.6 1.3	3.9 4.8	8.2 10.3	7.44 7.70

We have also found a small amount of stover when fed with silage to be a desirable addition to the ration. It will take the place of oat straw and other forms of roughness which are not commonly available in the South, and good shredded stover can certainly be fed as a maintenance ration to all work stock, and to horses and mules during the winter to good advantage. It had best not be the exclusive ration, and if some leguminous hays are fed along with it so much the better, but its value as a maintenance ration for growing cattle and for horses and mules has been grievously underestimated in the past.

ANDREW M. SOULE.

(To be continued.)

THE FUTURE OF THE BERKSHIRE HOG.

Editor Southern Planter;

I have been raising Berkshire hogs for some years, and miums at State fairs.

with considerable success; therefore, I think I am in a position to speak of the merits and demerits of this breed of hogs. I do not affirm that the Berkshire is the best of all the breeds, but do affirm that this is as good as any other breed, size excepted, and excels most all others in many respects. These being facts, why is it the Berkshire is a laggard in the race for popular favor, when he is the oldest recorded breed known to the farmer? Where is the proof to substantiate this statement? There were 30,000 Duroc-Jerseys recorded last year to 11,000 Berkshires. The Berkshires have had a record for thirty years, and the Durocs for sixteen. Why is the Berkshire hog losing ground when Mr. A. J. Lovejoy is authority for the statement that the packers say his meat is the best to top the market, as regards quality, and it does not shrink as much as the meat of other breeds? The American Berkshire Association made the mistake some years ago, of establishing a standard too high in many particulars-especially as to non-essentials-the consequences of which have been far-reaching, to the detriment of the Berkshire. As to color markings. The score card says the Berkshire is black, with white in face, on feet, tip of tail, and a splash is permitted on the shoulder. The American Berkshire Association has proclaimed these requirements from the housetops, and as a consequence every prospective buyer wants to know "if the pig is regular," if not, he doesn't want him; or, if he does buy, it is at a lower price. As a fact, not one-tenth of the Berkshires are properly marked. Of course, there must be a standard as to color and markings, but the standard as now fixed, is unreasonable, and totally lacking in common sense. Another requirement is, the hog must have very short legs, when every breeder in the country knows a Berkshire sow with a short body and short legs is not worth having, the longbodied, long-legged sow will farrow two pigs to the other's one. The Association has emphasized the fact that the Berkshire's head must be exceedingly short, and his nose to appear like a semi-circle. As a result a great many Berkshires are rejected on account of long noses, when otherwise perfect. Can't the American Berkshire Association learn something from the score-card of the Duroc-Jerseys? Their record says nothing about the nose of the hog, and simply requires "the face to be nicely dished, half way between the Poland-China and Berkshire." It strikes me forcibly the American Berkshire Association, when fixing a standard for the Berkshires, never once took into consideration these facts. Hogs are only serviceable as meat, and the ultimate end is the block. Everybody can't raise these hogs to sell as stock. In a few years the majority of breeders must sell to the packer. And the farmer wants the hog that will make the greatest number of pounds in the shortest time.

I have read with interest the proceedings of the late American Berkshire Congress held at Nashville in February last, and it is very clear they have seen the "writing on the wall," and have proposed certain expedients to set aright the mistakes in the past, and to stop the stampede of the Western farmer towards the ranks of the Duroc-Jersey.

Expedients.

A field department; an advanced registry; awarding premiums at State fairs.

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Want of space forbids comment on these propositions, but they are simply expedients, and do not meet the needs of the case. It is doctoring symptoms and not the disease. The Western breeders are responsible to a great extent for present conditions that militate against the Berkshire. Why so? They have been pulling together, and have been selling Berkshires at about five times their real value at their public sales, and in this way have gotten it in to the heads of the farmers that it takes a rich man to stock up with the Berkshire; and the truth is, it does if you buy from the West. Under present Western prices the farmers of small means must put a mortgage on his farm or sell it to buy a pair of Berkshire hogs.

The Public Sale.

The public sales held by the Western breeders have put a great deal of money in their pockets without corresponding benefit to the buyers. This is a pretty broad statement. Now, let us see if it is sustained by the evidence? Messrs. F. W. Morgan, C. F. Curtis, and H. B. Brown were appointed a Committee on Breeding Better Berkshires. These gentlemen made a report to the last Berkshire Congress, stating they had written to all the breeders whose names they could secure, and filed along with this report responses from 158 breeders, located all over the country. Almost to a man, they, the breeders, attacked the system of fitting animals for the show ringthat is, by feeding large quantities of corn, thereby putting on every possible pound of flesh; the object being to cover up as many defects as possible with fat; thus almost entirely incapacitating the hog for good breeding. Moreover, these breeders declared they had bought a great many of these show animals, and they had turned out bad breeders. H. C. and H. B. Harpending say, in the May issue of The Farm Home: "We have purchased five or six boars from Western herds, and they were of the best breeding, and good to look at; but there it ended. They were gobs of fat, and it would take us three or four months, with judicious feeding and forced exercise, to get them in shape, so that we could use them at all." I lay great stress upon such evidence, as it comes direct from the people who ought to know, as they speak from experience. So it appears a good many of the Western breeders are selling goods they can't deliver.

There have been very few public sales in the South. The public sale is not the best place for the intelligent farmer to get his stock; he sees the animals in their Sunday clothes, as a rule, has very little opportunity to ask anything about their performances in the past; and besides, how does he know how many by-bidders are standing around to boost the price. The place to buy your stock is at the home of the breeders; go there and not only examine critically the pig you propose to buy, but take a good look at his sire and dam. Find out how many pigs the dam usually has in a litter, and if she is a good suckler. There is far more in the individual than in the pedigree, but you want both combined if possible. The breeder of the South has never received one-half the price obtained by the Western men, notwithstanding the animals and their pedigrees were just as good. And as to the breeders in Virginia, they have been asking a mere pittance for their Berkshires. This is not right, the same hog under the

same conditions ought to bring the same price whether he be born in the West or Soutn.

It is high time the American Berkshire Associationshould sit up and take notice. The score-card will have to be revised along the lines indicated above; and the-Western breeder will have to cut his prices in two; or the-Southern breeders will be forced to form an association of their own, and establish a new record along the linesof utility and common sense.

The writer has no Berkshires to sell, and does not ownot one at present.

South Boston, Va.

E. W. ARMISTEAD.

MAKING CHEAP PORK WITH GRAZING CROPS

(This, the first of a series of articles which we shall publish upon the important subject of Hog Husbandry in the South. The articles will deal with every phase of the subject, and review the experiments made in various sections of the country with all the different grazing and feeding crops used in hog feeding. Every farmer interested in hog raising, and every farmer ought to be, should carefully read these articles, and he will then be in possession of all the facts which should go to make him a successful hog raiser.—Ed.)

Editor Southern Planter:

At the outset it will be well to compare the economy of 8swine husbandry with that of cattle raising. Lawes Gilbert, the celebrated English investigators, have shown conclusively that the fattening ox consumes 12 to 15 pounds of dry substance per pound of gain as compared with 4 to 5 pounds for hogs. Thus two or more pounds of pork canbe made on the food required for one pound of beef. Though the sheep is considered one of the most profitable and economical animals to maintain on the farm, the hog. makes a pound of gain on one-third to one-half less dry food. The hog also yields a high per cent, of dressed meat -from 74 to 82 per cent. With cattle the per cent. of useful cuts runs down as low as 45, though in some cases it may go as high as 70; and with sheep, depending on theage and condition, from 40 to 60 per cent. The hog is an economical animal to maintain, as well as an excellent scavenger though care should be taken in maintaining hogs on slops to see that the containers and the pens are properly disinfected, for there is little doubt that many of the outbreaks of hog cholera are due to a neglect of these matters.

Small Capital and Equipment required.

There is another reason why hog ranching might be engaged in to advantage, namely, the cheapness of the equipment needed to carry on the business on a large scale. The purchase of a few good brood sows and a pure-bredboar of one of the recognized breeds does not call for a very large outlay of cash, which is often an important matter with the small farmer. The shelters or buildings needed for hogs can be cheaply and easily constructed. In fact, suitable pens for the brood sows may be made as home out of pine boards and 2 x 4 scantling. These may be built on skids, and should have a good plank floor. The floor should slope so as to drain well, and the house need not be more than three feet high at the back and seven. feet in front. It may not be more than six or eight feet square. The pig rail should be eight inches above the floor and project out into the pen twelve inches, to prevent the sow from lying on the young ones and killing them at farrowing time." The roof may be shingled, or it may be made of rough boards with battens. One side of the pen may be left open or a door constructed so the sunfight and air can enter freely, or for that matter, a swinging door can be made so that the pigs can get in and out at will. A pen of this character can be drawn from place to place with a horse, and a dozen of them can be erected at a cost of a few dollars. Of course, much more elaborate and expensive structures may be built, if desired, but they will not be any more satisfactory.

Quick Returns on Investment.

For the small farmer, the hog is the animal par excellence to grow, as he matures in from ten to twelve months, and has a ready cash value on the market. Furthermore, hogs can be raised cheaper than any other class of stock, for under the modified system or practice outlined below hogs may be made to weigh 180 to 200 pounds in ten to twelve months on a minimum ration of grain, say five to tem bushels of corn. This compared with the exclusive corn fattening generally practiced would revolutionize the whole business from a financial standpoint. The South does not grow corn on anything like the scale followed in the West, but it has been clearly demonstrated that substitutes of equal value to corn can be utilized in the South at 2 minimum of cost, so that the compensating influences of nature have placed the Southern farmer on a plane where he can compete successfully with the Western hog zaiser.

Inroads of Cholera.

The hog has long been recognized as a mortgage lifter, but his good qualities are often ignored because of the inroads which the dreaded disease, cholera, makes all too frequently in the herd. There is no "cure all" for cholera, but if the hog were generally prized and given that ettention which he merits, there would be less trouble from cholera. Diseased hogs should be isolated, and when they die, destroyed by burning. A large per cent. of the bogs raised are aflowed to range at will, and should one die, the carcoss is left just where it fell, and buzzards and other birds scatter the germs here and there. Many of the hogs that die contaminate the streams, and animals further down contract the disease in this way. The man who hopes to make money out of hogs must look after the sanitary condition of his animals, disinfect them properly, see that the pens are well cleaned and cared for, and that wholesome food is provided. Attention to these details will generally be found effectual in protecting the herd.

Essentials for Successful Hog Raising.

This brings us to a consideration of some of the essentials for successful hog raising. Among the first things needed is a cheap supply of grain. Where this is lacking the would-be hog raiser has concluded that the business can not be followed successfully. It has only occurred to us during recent years that many desirable substitutes for corn and other grains might be found. It is now so well established that grazing crops, in which the legumes predominate, can be utilized for the maturing of hogs depth of side and better developed hams and shoulders,

that the grain problem has been solved in a highly practical and satisfactory manned.

Another great drawback which was thought to be a serious obstacle for many years, was the lack of skim milk. But it is quite possible to grow good thrifty pigs, and make them thrive from the beginning at a moderate cost, on grazing crops. After all, this is not so very surprising, and it is not strange that the conditions to which we have subjected swine since bringing them under domestication should be entirely at variance with the environment to which they were accustomed in a state of nature. It is well known that the wild hog lives largely on grass, roots, mast, etc., and yet it is generally believed that the only way to grow hogs is through the use of corn, grain and skim milk, and these failing, the business must of necessity be abandoned. In the South, where there are thousands of acres of rough land yielding an abundance of mast, and where such a variety of leguminous crops can be grown successfully, the lack of corn and skim milk need not deter any one from entering the field of swine husbandry and making the business highly profitable.

Quality and Character of Animals Available.

Some have said that the prevailing type of hogs found in the South is unsatisfactory for the economical production of pork. In certain experiments made at the Wisconsin Station, it was shown that the razor-back swine yielded as high a per cent. of dressed meat as different types of pure-bred hogs. Now, do not misunderstand me. I do not advocate the exclusive use of the native hog, though he has some virtues which may properly be extolled; but the native brood sow, if mated with a pure-bred sire,, will produce a type of hog for use on the average farm which will prove satisfactory in every way, and a vast improvement over the native or scrub. The importance of using a pure-bred sire is evidenced by the fact that high grades will weigh one-half more, and in some instances twice as much as the native hog at the end of eight or twelve months of age, and when slaughtered will not lose more than 20 to 25 per cent. of the live weight; whereas, the native or scrub will seldom dress out more than 60 to 65 per cent. of the live weight.

There is another great advantage in the cross of the purebred sire on the native type in that the bacon made by the high grades on peanuts, chufas and other crops which tend to make the fat soft and oily, is of a much firmer and more desirable texture. At least, this is the judgment of Bennett, of the Arkansas Station, who has made a thorough study of this question. As a pure-bred sire of the highest type can be purchased at a cost of \$15.00' to \$25.00, there are few if any farmers who can not afford to make an investment which gives them animals possessing such material advantages over the razor-back type. At the same time the native hog, being inured to certain hardships, is not so likely to succumb to disease. He is of necessity a better rustler and will gather his food with greater relish, and the quality of meat obtained is greatly superior to that of the lard-producing type raised exclusively in the West.

The kind of stock we have on hand, therefore, is almost ideal for foundation purposes. Earlier maturity and a more desirable conformation, that is, shorter legs, a greater

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will follow the crossing of a pure-bred sire, say of the Berkshire type, on our native stock. It is a cross of this kind that has produced the famous Smithfield hams, which command year in and year out 28 to 30 cents a pound at wholesale; and so great has become the demand for this class of hams that it is now said that many hogs are shipped in from the West and slaughtered in the vicinity of Smithfield, the hams cured after the process so successfully practiced there, and sold as the genuine article. Farmers of the South, this is a misfortune for you, for the flavor and quality of the ham made under the grazing system is superior to that made fro mWestern grown hogs and this is a trade which has been developed to a highly satisfactory degree, and there is no reason why it should not prove one of the most lucrative and profitable forms of farming you can engage in. It is to be hoped that a word of warning along this line will be sufficient, and that you will rise to the occasion and keep intact your reputation for growing and curing the choicest quality of bacon and ham known to the civilized world. . Expand the business as you should until it meets all the demands of the market, for with a rapidly increasing leisure class, there are thousands of people with plenty of money and epicurean tastes who are willing to pay any price for an article that suits them, and hams at 25 to 35 cents per pound mean money to the swine raiser.

There is no secret about raising and growing hogs of the type that will yield fancy hams. The poorest farmer, by giving attention to the business, can accomplish it just as well as the wealthiest. There is more difficulty in curing and preserving the hams properly, but the method pursued in many sections of the South is well known, and there is no reason why it should not be imitated with success.

Necessity of Community Slaughter Houses.

One of the things that is needed to make the business grow and develop as it should is the construction of a slaughter house for a given community, where all the hogs of a certain type can be brought and slaughtered under uniform conditions, the hams dressed and cured after the most approved method, and sorted and graded and sold according to class and quality. It would cost practically nothing to establish such a slaughtering station; and yet if the hams could be obtained in quantity of a uniform grade and quality, the buyers would come right to the factory door and pay fancy prices, and be only too glad of the opportunity to take them away.

We are looking at the present time for some means by which we can increase the profitableness of our agricultural lands. Here is a means right at our own door, and a great and important industry shamefully neglected because it is not appreciated. We have thousands and thousands of acres of land well suited for ranging hogs; and a few of the acres we are scratching over and cultivating in cotton, corn and other crops, sometimes at a profit but often at a loss, could be put in grazing crops and utilized to maintain an improved type of hogs at a good profit to the owners.

No Difficulty in Curing Choice Hams.

The curing of a ham that will equal the choicest output of Smithfield is a simple matter if proper care and attention are taken. First of all, the hogs should weigh from ghum and peanuts, 1.1 acres in all, and consumed \$10.60

180 to 200 pounds. They should be brought to this weight in ten months, and should not be fed much corn. They should be allowed to range as much as possible, because that insures a better blending of the fat and lean. In the early winter slaughter them and allow the meat to hang out all night to thoroughly drain and cool. The next day cut up after the approved method, leaving as much meat on the shoulder and the ham and side as possible. On the fleshy side of each ham rub in thoroughly a tablespoonful of fine saltpeter. Use at least this much to a fifteenpound ham. Then pack away for six or eight hours with the fleshy side up so that the saltpetre may have time to strike in. Do not pile the hams too high or they will be crushed out of shape. Kneading and proper manipulation at the time of packing is a very important matter, as a symetrical and well-rounded ham will sell to better advantage Next pack away and salt, but never pile over two and a half or three feet deep. Let them remain there for at least six weeks; then when taken out of the salt, sprinkle well with powdered borax. There is nothing better for the distribution of the borax than a pepper-box. About a teaspoonful will be enough for a ham. The borax is used to keep the skippers out. Next, hang up by the hock and smoke lightly during damp weather with hickory chips. When about nine months old the hams are ready to sell. A hog averaging 180 pounds will make two hams of about 18 pounds in weight. Larger or smaller hams are, of course, undesirable. But suppose one only obtains 24 pounds of ham. At 25 cents the hams alone are worth \$6.00. If they weigh, as they ordinarily will, say 15 pounds, two hams are worth \$7.50. A hog weighing 180 pounds and seling at 5 cents a pound on foot, which is a profitable price, is worth \$9.00. Yet the skillful farmer has practically obtained the sale price of his hog for two hams and has all the rest of the meat left for his trouble. A 180-pound hog, dressing out 80 per cent., would yield 144 pounds of good meat. If the green hams weigh 40 pounds, there would still be 104 pounds of meat left The average price for the back, sides, ham trimmings, etc., on the Chicago market varies from 5 to 6 cents per pound, the choicest parts selling for $6\frac{1}{2}$ and 7 cents. 104 pounds of pork at 5 cents would be worth \$5.20; at 6 cents, \$6.24. This added to the sale price of the hams mentioned above makes the production of this type of hog highly profitable to the farmer. Then, it should not be forgotten that there would be two nice strips of choice bacon worth 15 to 20 cents a pound.

At this point the conclusions of Mr. T. O. Sandy, a large and successful farmer in Virginia, will be interesting. He utilized wheat, artichokes and clover until May sown peas and sugar-cane were ready, which will be late in August, and will last until November or December. The hogs were then turned on artichokes, where they did very well until April, with the addition of a small amount of grain. Then in June they are put on clover and wheat, which lasted until peas come again. In this way Mr. Sandy has been able to make pork at a cost of 2 to 3 cents a pound.

Bennett, of the Arkansas Station, made some tests to determine the cost of pork raised entirely on grazing and a limited grain ration. Pigs were grazed on clover, sor-

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worth of wheat bran and shelled corn The pigs were sold at \$3.25 per hundredweight and made a profit of \$4.27 per head, the actual cost of the pork per pound being 1½ cents. There is thus every reason to believe that under intelligent management pork can be made on grazing crops at from one-third to one-half the cost where corn alone is fed. It is the cheapening of the cost of meat products that makes the profit to the farmer. Why not utilize grazing crops in the light of these facts, and make the hogs harvest the crop at the same time? The labor problem is now a very serious one, and this is one way of economizing with satisfactory results.

I desire particularly to emphasize the advantage the curing of fancy hams has over ordinary methods of pork raising, and to specifically urge on the small farmer the opportunity which it opens up to him. Remember that choice hams can be made by the small farmer just as well as by the owner of several thousand acres of land.

A. M. SOULE.

(To be continued.)

NORTH CAROLINA AGRICULTURAL COLLEGE DAIRY ACCOUNT.

Editor Southern Planter:

Will you kindly request Prof. Michels, of the North Carolina A. and M. College, to publish how many gallons or pounds of milk were produced by the forty-one cows during the nine months reported in your August issue?

Also, whether in the item of labor the work of horses is included for hauling feed, delivering milk, etc. Are "overhead expenses," such as superintendence, etc., included in that item?

Does the item, "Sundries," include depreciation, interest and repairs on silos, stables, hay barns, water works, machinery, tools, etc.?

In estimating the cost of feed was the item of \$880 for manure charged to the feed? As that item is credited to the dairy it should be charged to the crops.

How many quarts were sold at 6 1-4 cents? How many quarts of cream were sold at 25 cents per quart, and what was done with the skimmed milk?

How many quarts of milk were used for butter and how many pounds of butter were sold?

Where is a market for butter at 35 cents per pound all year round?

Was the milking done by hand or by machine?

What was the cost of delivering milk to express station, and what is the express rate to city? What is the net wholesale price per 10-gallon can in the city?

If this particular farm is so located that milk can be sold locally at a higher price than the wholesale market, it should be so stated, otherwise the report is misleading. Expressage often is 1 cent per quart; delivery to station must be considered.

If this milk had to be shipped and sold at wholesale prices, as the milk of the average farmer necessarily must be, the account of this dairy might show a loss instead of a profit

Prof. Michels sends us the following reply to the foregoing:

It would take too much time to go over our accounts to

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determine the exact number of gallons of milk and cream and the exact number of pounds of butter that were sold during the nine months reported for our college dairy herd. Approximately four-sevenths of the total milk produced was sold in bulk at 25 cents per gallon; two-sevenths was sold as cream at \$1.00 per gallon net; and one-seventh was sold as butter at 35 cents per pound.

All of the butter was sold in West Raleigh. Some of the milk was shipped, but the bulk of it was sold to the college mess hall at the same price we realized for that which was shipped. The cream was sold in Raleigh, Wilmington, Pinehurst, Greensboro, and Camden, S. C.. The skim milk was fed to the calves.

The item, "Sundries," did not include interest on investments, depreciation of property and repairs. \$300 would fully cover these items.

The roughage consumed by the cows was charged at actual cost of production.

The manure was figured as a separate item, as much so as was the milk and cream. Our system of management is such that no manure is lost, either through leaching or fermentation, and the item of \$880 for manure represented a minimum value for this material. If our dairymen would value their manure the same as they do their milk and cream, they would allow less of it to go to waste.

It should be added that we could have shipped our entire milk output at the price quoted. As for cream, we could have shipped fifty gallons a day at the price quoted. Thousands of gallons of New York cream are annually consumed in North Carolina because of the shortage of this product here

There is plenty of market for butter at 35 cents per pound. All that is necessary to realize this price is to make a good quality of butter and cater to a select trade. Several of our dairymen last year averaged over 30 cents per pound by shipping the butter in bulk in amounts approximating 400 pounds weekly.

JOHN MICHELS,

Prof. Animal Husbandry and Dairying.

STUDENTS' LIVE STOCK JUDGING CONTEST.

The Dairy Division of the Bureau of Animal Industry, United States Department of Agriculture, has just completed arrangements for a judging contest and prizes for individual students, three of whom may be entered from each college, the three men constituting a team in judging for team prizes. This judging contest has to do with dairy cattle only, and will take place in the live stock department of the National Dairy Show Association at Chicago, at the time of the International Show in December. As to eligibility, "any student of an agricultural college or of a secondary school which is under direct supervision of a State agricultural college, who is regularly matriculated in at least a two-years course in agriculture or dairying, and who has taken not less than twelve weeks' work during the calendar year in which the show is held, may enter."

From this it is evident that any of the students of either the two-years or four-years courses of the Virginia Polytechnic Institute will be eligible as contestants for the prizes offered in this judging contest. The advantages to

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the student are very great. The incentive to succeed in first meeting or two it was found impossible to get enough the contest will cause all students to make greater effort in their study of the standard of excellence and score card of the various breeds of dairy cattle. The students of the various agricultural and mechanical colleges of the United States have entered for the prizes, not only in the dairy line, but in all lines of animal husbandry at Chicago, the event of the United States of the year.. We trust that a large number of the students of the V. P. I will visit the International Show this fall, and be prepared to enter for the prizes as judges in the dairy cattle contest, and also in any and all contests in animal husbandry.

Your space is doubtless too limited for the complete rules and regulations governing the dairy cattle contest, but we would be pleased to see the same appear in the issue of October 1st. If this is not possible, permit me to state that copies of the rules and regulations can be procured by addressing the Dean of the Agricultural Department, V. P. I., Blacksburg, Va., or secured by students after their arrival at the college.

All prospective contestants must file their entries with Prof. B. H. Rawl, of the Dairy Division, U. S. Department of Agriculture, Washington, D. C., and with the Superintendent of the Live Stock Department, 154 Washington Street, Room 307, Chicago, Ill., before November 20th. This gives plenty of time for students to review their work of the past year on judging and the application of the score card; also to arrange for the team work and attendance at the great show of Chicago, the time of this contest. In the meantime it shall be our pleasure to ascertain fully as to all other student contests to be held at the time of the International

We certainly hope Virginia will be to the forefront in this contest, and at least have a representation of a good body of students well versed in animal husbandry.

WALTER J. QUICK,

Blacksburg, Va. Dean and Prof. of Animal Industry.

A CALL-VIRGINIA STOCK BREEDERS' ASSOCIATION Editor Southern Planter:

The advantages of a State Live Stock Breeders' Association are so well understood that it is hardly worth while to mention them in detail. Almost every State, especially if producing many pure-bred animals, or if having many breeders who are deeply interested in the improvement of live stock, has a general association in which all such breeders, representing the different breeds, have combined their various interests in a general cause. In many States there exists a breeders' association for almost every pure breed of live stock.

The general association which we propose for the State of Virginia, in other States has its business conducted by a board of directors composed of two or three members from each of the various breeders' associations. Unless the various breeds are strongly represented, these individual associations are very weak. It frequently happens that only two or three breeders represent a certain breed in the State and even if there are half a dozen or more good breeders, there are not enough to cause the organization to meet even once a year and discuss the topics of importance to them. To illustrate the point: Hereford cattle are bred by a number of good farmers in this State. An organization was formed some years ago, and after the

of the breeders together to have a successful meeting. The result was that the association disbanded the past year. By having a general association, its meetings would be attended by all the breeders who have joint interests, it matters not what breed of live stock they represent. At the time of the general meeting the various representations can be broken up into sectional meetings at such time as is planned, so as not to interfere with the general meeting.

There is in the United States, with headquarters at Washington, Department of Agriculture, a still larger organization than the one we propose, and which is known as The American Breeders' Association. This association is made up of breeders from any State in the Union and of representatives of the State live stock associations, such as the one we propose for Virginia. A letter jut received from Assistant Secretary Wm. H Hays, of the Department of Agriculture, states that the American Association will be pleased to co-operate with the Virginia live stock association proposed. The American Association proposes to start a magazine, which will be known as the American Breeders' Magazine.

It is proposed that the Breeders of Virginia meet at the time of the State Fair for the purpose of organizing this State association of breeders, and that the meeting be held Thursday evening, Oct. 8, at 7:30 at Murphy's. Assistant Secretary Hays, who is secretary of the American Association, will be with us and assist in the organization. Circ-lars announcing the meeting will be distributed at the State Fair, any change of date will be thereon noted. The importance of this organization to every breeder of purebred stock is so great that it is earnestly believed that there will be a very large attendance and a flattering membership secured at the first meeting of the "Virginia Stock Breeders' Association."

WALTER J. QUICK, Blacksburg, Va Dean and Prof. of Agriculture.

MORE FINE DORSET SHEEP FOR VIRGINIA.

Editor Southern Planter:

The many readers of your valuable paper who love fine stock will be gratified to know of the arrival in this country, destined for Morven Park, of seventeen prize-winning Dorset Horned Sheep, from the celebrated Flower flock, of England. Mr. Flower writes under date of July 16, 1908, as follows:

"Five of the shearling ewes were shown in their wool in a class of ten entries at the Bath & West of England show, and won first prize as a pen against nine competing pens. The ram lambs were the two best lambs in my twenty-five guinea challenge cup winning pen of six at Dorchester. The ten field ewes which I am sending won first prize at our annual show at Dorchester in 1907, when ewe lambs, and are all twin lambs born. You have in this shipment some of the best blood that ever sailed to America. I had a good look in at the Royal, winning three firsts, and first for wool against all short wool breeds. This is a feather for the breed"

You will note from the above quotation that we are doing everything in our power to secure the highest class animals possible for our breeding operations at Morven WESTMORELAND DAVIS. Park.

Morven Park, by Leesburg, Virginia.

The Poultry Yard.

POULTRY NOTES.

This is the month of rest, both for the flock and the owner. The yearling hens should be in full moult, and will be a sorry-looking lot. Good, nourishing food must be supplied liberally at this time. Shade and fresh water, sharp grit and meat in some form; charcoal, lime and iron in the regular morning feed will keep the flock in perfect health and thus hasten the moulting period. Grit, meat, charcoal and oyster shell can be kept in self-feeding boxes where the fowls may help themselves at all times. Iron may be given in the feed or drink. I prefer to give it in the feed. Dissolve a tablespoonful of sulphate of iron (copperas) in a quart of hot water for twenty fowls, two or three times per week. Mix this in the mash fed in the morning. I have recently made a self-feeding box that is very satisfactory. It is easy to make, easy to fill, easy to clean and economical, in that fowls cannot waste the contents. I will describe it so that readers of the Planter may try this method of feeding: Take a board 12 inches wide and four feet long for the bottom; two boards 12 inches wide and two feet long for the ends; two pieces 4 inches wide and 50 inches long for the sides of the feed box, and two pieces 5 inches wide and 50 inches long for side of top, and two pieces 12 inches wide and 50 inches long for the cover or roof Cut one end of end boards to a square mitre from centre of board to each edge. This is for top and for roof to rest on. Nail end boards on bottom board, leaving bottom two inches from ground; nail side boards, 4 inches wide, on sides flush with bottom, top side boards, 5 inches wide, leaving three-inch space between bottom and top side boards. Nail the top or roof boards together in the form of a V trough, and invert over V shaped end boards, but do not nail fast. This top can be laid off when filling or cleaning. Make the open space narrow enough so that half-grown chicks cannot get into the feed. For a small flock a division board can be put crosswise, and one of these feeders can be used for grit and oyster shell and another one for meat and charcoal. Wheat and oats may be put before the flock in this way, too, but corn should be fed at the evening feed, and fed very sparingly during hot weather.

September is a good time to hatch chicks of any of the American and Leghorn breeds, as the pullets will begin to lay in March and April, and will continue to lay well after the earlier hatched ones fail. My experience is that September and October hatched chicks are very hardy and make excellent laying stock. The most serious objection to them is the fact that they usually moult very late. One great difficulty in hatching at this season is to get good hatchable eggs. Early hatched pullets will furnish some, and some extra prolific hens will lay now. Yard these pullets and hens with the best male and you will get eggs and stock from your earliest pullets and most prolific hens.

I get many letters from people who have sick fowls, asking for remedies. I want to say to the readers of the Planter that I am not a doctor. I do not believe in medi-

cines of any kind for man or beast or fowl. If we live right-keep clean, eat good, sound, wholesome food, take pletny of exercise in the open air, be temperate in all things we will need but very little attention in a medical way. If we feed our fowls right, good sound food, clean water, clean open houses, no lice or mites, good range, we will not need to dose them with condition powders or nostrums of any kind to keep them healthy. Much of the food we buy is adulterated, impure, unwholesome, unfit for human consumption Very much of the feedstuff sold in the South is unfit to feed to poultry. Corn that is mouldy, musty, that has undergone fermentation (heated) in the crib or bin; sprouted and musty wheat and oats, bran and shipstuff that is adulterated with ground corncobs, peanut hulls and spent tanbark is unfit to feed to chicks or mature fowls, and I find it very hard to get these feeds pure, sound and sweet. The people must demand not only a pure food law, but rigid inspection and quick and severe punishment to the manufacturer, the producer, and dealer. (We have now such a law, and it is being enforced.-Ed.) Many thousand chicks and fowls are killed every year by the use of mouldy grain and meal. There is a disease called mould, caused by fowls eating mouldy feeds that kills as speedily as cholera, and kills many more chicks and fowls every year than that dread disease. If people would be careful in selecting the feeds for their flock and keep their quarters and runs clean, there would be very few deaths excepting by accident and old age.

Several subscribers ask for full and complete information, with plans and specifications, for a poultry farm, to accommodate 2,000' hens. I cannot undertake to answer these questions in detail in these notes or by letter. Only a very limited number of the readers of the Planter are interested in such a project, and to reply by personal letter would be impossible. I want to say in this connection that I am writing a book on poultry-keeping in the South, giving plans, drawings, half-tone engravings and plain, practical instructions for the equipment of large and small establishments. This book will be published by the Southern Planter Co., and will be ready for distribution by November, 1908.

One man asks this question: "How much land will it take to keep 1,000 laying hens, and could one man do all the work? How much should one realize net from this number of hens and buy all the feed?"

I have never advocated the intensive plan of keeping poultry. I doubt its practicability. I can see much in favor of the large yard system, and favor free range where possible. Land can be had almost anywhere at prices within the reach of very moderate means, and I would not attempt to keep 1,000 hens on less than ten acres of land. This could be divided into twenty yards of one-half acre each. This would enable one to change his entire flock on fresh land every three or four weeks. By keeping these runs seeded to grass, clover, rye, oats and other growing crops, the land would be kept clean and very much expense in labor and feed saved, besides giving the very

best possible conditions for the birds. This would require ten houses, or the ten acres could be fenced into four lots of two and a half acres, each with two houses This would put 500 into each house and set of yards and reduce time and labor nearly one-half; yet I favor the smaller flocks and houses. The net profit depends very much on the man. A good business man with a flock of 1,000 good hens of a good laying strain of egg producers, could easily make a net profit of \$1.50 per hen, or \$1,500. If these yards would be set to small tree fruits, such as plums, damsons, apricots, peaches, early apples and even winter apples and cherries, the profits from the ten acres could be increased very materially, if one had a nearby market for the fruit. By having twenty yards 20 rods long by 4 rods wide, one could plant one row of trees in the center of each yard. Plant them fifteen feet apart in the row. This would give room for 400 trees and afford ample shade for the hens. By planting all of one kind of fruit in each separate yard the fowls could be changed about so that at picking time the run could be cleared for several days or weeks. This arrangement would not interfere with the cultivation of the soil, and the fowls would keep the land rich and the trees and fruit free from insects.

CAL HUSSELMAN.

LOSSES TO BE AVOIDED.

Editor Southern Planter:

There is no class of farm stock of which large numbers can be kept, including both sexes and all ages, without some losses by accident or death. The common fowl offers no exception to the rule, and as the average hen is of shorter life than most other farm stock, is far more prolific, and is usually kept in greater numbers, it follows naturally that a small number of dead hens and chicks may be expected under normal conditions every month in the year. A writer in one of the leading agricultural weeklies recently estimated the loss of young chicks at 50 per cent. within the first five weeks after hatching, and asserted that very few breeders lose less than 25 per cent. during that period, and he spoke from a more or less accurate knowledge of large commercial enterprises. This statement was incidental to an argument to show that the average thoroughbred pullet should not be sold at five weeks old for less than 75 cents, and that a price of 50' cents at that age did not provide an adequate return for the producer.

While this estimate of loss seems to me excessive, and is far beyond anything in my experience with Barred Ply mouth Rocks, yet we are all trained to expect some losses of weak chicks in spring and early summer, and some losses by drowning in sudden summer storms, but of the losses which do not result in death, and which occur later in the season, many of us take no account. I wish to call attention to a few of these.

First I will pass over the question of vermin very briefly, as enough has been said in past issues of this paper. There are a very few chicks now so young as to need hand treatment for lice. When this is necessary, I prefer hens oil—the skimmings of the kettle when the fat hen is cooking—with, say, half its bulk of kerosene added, to any other application I have tried. It does not leave the chicks so sticky as lard does. But in September the dust bath, and oiled roosts disconnected from henhouse

walls, must be depended upon to help rid fowls of lice before winter. If you had a good brood sow which was very lousy you would not grudge two or three hours' time to get her clean. Well, I feel safe in saying that two dozen pullets hatched prior to June 1, have on September 1 greater possibilities of profit within the six months next following than has the average sow. Therefore, take a few hours and make provision for a good dust bath. If you must build one take this suggestion: Two posts or forked stakes set east and west, on a south slope preferred; a pole across the tops, and any old boards or mill slabs leaned against the pole from the north side; a furrow turned or equivalent ditch dug for lower ends to rest in and the dirt thrown under the pole to help raise the level of the dust bath a little. If you can't do better, cover with a lean-to roof of pine brush, cornstalks or straw. As cool weather comes on I prefer the dust bath in the sun. The philosophy of the dust bath is simple. The fowl works the dust through the feathers and against its The lice are forced out toward the ends of the feathskin. ers to get more air. The heat of the sun is congenial and helps draw them out. Then the hen gets up and gives a vigorous shake, and the dust, dirt and sand particles shooting out through the plumage help to dislodge the half-suffocated insects.

The moulting season is nature's time for ridding poultry of most of the lice. The new feathers do not develop their full growth of down till about the beginning of winter, and in the half-clad condition the hen has her best chance to secure relief by natural means.

Second. The losses of vitality and growth due to bad sleeping arrangements. Has any reader a lot of chicks still roosting in the coops where they were brooded when small? If so, I will ask him to go out on the first warm night after he reads this and quietly open the top of the coop (every coop should be so made that this can be done), or kneel down and put his nose in the doorway anything to get for himself a fair sample of the air the chicks are breathing Then let him decide whether they are having a fair chance to develop rugged, productive bodies, fitted to yield a profit in eggs on the food consumed all winter.

Again, if these chicks have a chance they will go into the trees. If of large breeds this means badly bent breastbones, and an unattractive carcass when dressed, and no matter what the breed, it means saturation in every stormy night, and during the fall storms, now soon due, it means a state of wet plumage for perhaps four to six days without relief. To keep up bodily heat and force evaporation then require a drain on the vitality and food supply which should go wholly to prepare the pullet for winter business.

I have no accurate measure of the losses due to stuffy, dirty coops, or to exposure of immature pullets to all the rains of the latter half of the season, but I suspect that herein may be found the reason why some pullets do not lay until spring while others of same breed are profitable all winter.

fat hen is cooking—with, say, half its bulk of kerosene added, to any other application I have tried. It does not leave the chicks so sticky as lard does. But in September the dust bath, and oiled roosts disconnected from henhouse ing the coming winter. While hens are moulting and | readers with any communication from this portion of the pullets developing, I doubt if it is possible to overfeed. The Development of the Flock.

We are still hatching young Rocks, and are planning for some September broods. The fertility of the last tested eggs was good. Two infertile and one dead germ out of forty-three eggs set. It is too early to tell what the losse: will be in the August hatches, but those which came out late in July, and were put in coops with yards on young crimson clover have a large proportion of happy, plump, big-bodied chicks, which ought to make good birds.

One reason for hatching so late is because our males from the Maine Experiment Station, 200 egg strain will not be so active another year as now, so we are anxious to get as many females hatched this year as possible. We will probably dispose of one of the Maine males, keeping one for a special mating in a small flock next season.

We have sold more young cockerels for breeding than ever before at this season, and are marketing all that do not show excellent breeding quality, but are hatching about as many as we sell, so that the young stock remains at about 750, and they are now eating a bushel of wheat per day! Corn is worth eighty-two cents per bushel, so they get none, except as we bake bread with meat in it for the very little chaps. Although the wheat is new, they will eat more if it soaked than when fed dry. We aim to keep it before all the fowls, old and young, all the time, though many of them spend all day in the woods. only coming to the troughs twice a day. Under this system our cockerels are as large as, or a little larger at same age than the Maine Experiment Station can produce by heaviest forced feeding.

Though our roosting coops are well ventilated, they are becoming crowded, and to-day, August 17, work began on the plain permanent buildings which are to house the fowls next winter. We hope to have all moved within a month, and begin keeping feed accounts against specific numbers of males and females separately. I plan to put fifty or one hundred first class cockerels in an isolated house, with old field and woods range, and keep a feed record with credit account for those sold as breeders A similar account may be kept with 200 earliest pullets, except that the credits will be for eggs laid, as we will part with but few of these. I would like to know just what the margin of profit is when we feed wheat at an average price of ninety cents per bushel, to grow cockerels for market at sixteen or seventeen cents per pound. I think there is some if we sell at the one and a half- or two-pound size, but the latter weights are more costly. The sales of cockerels for breeding and for table use paid about two-thirds of the feed bill for the entire flock during the past month. I think the sale of all males at two-pounds size would very nearly pay all feed bills for the summer, and leave the pullets as profit for our eggs and labor.

Vienna, Va.

W. A. SHERMAN.

NOTES FROM FAIRFAX COUNTY, VA.

Editor Southern Planter;

It has been some time since we inflicted your many

Old Dominion. The reason: First, we have been busy. Second. We had nothing to say.

We believe it was in the June Planter that Professor Massey stated in one of his very numerous, intelligent and excellent communications, that "Mr. Jeffers was going to show the people of Fairfax how to raise poultry," or words to that effect. Also stated something to the effect that there was no money in poultry. Now, as to the first statement, we beg to say we do not expect to "show" anybody anything unless he is "from Missouri," and asks to be shown Nor do we expect there is a fortune in fowls. We are surprised, however, to see anything from the voluminous pen of the Professor that smacks of pessi-

mism. The poultry business, like all other lines of business, must be well handled in order to pay. Too many people rush into the work of raising poultry, only to be confronted and confounded by troublesome details that were not carefully considered at the outset.

If one has a good location, accessible to the consumer, and can raise his own poultry food, or buy it at lowest market prices, and has a natural liking and a fitness for the work, he will succeed. Not all business men succeed. Farming in many a line is not a howling success. Only "the fittest survive" in any calling.

Comparatively few, a very few, professional men in any calling attain a marked and noticeable success. The mass plod along as best they can. In poultry it is just the same as in physic, or in politics. It is said that "opportunity knocks at least once at every man's door." If it is met in the right way success follows. If neglected or rejected failure results.

We have not progressed far enough as yet to tell any one how to do, but we can tell them a few things "not to do."

Don't buy a lot of scrub, inbred stock, to begin with, not even if it be secured very cheap. Don't go into the work until you have arranged for proper and comfortable shelter for both old and young fowls. Don't get too far from market. If possible, raise at least a portion of the food consumed by poultry.

Don't try to sell eggs for breeding purposes unless the fowls are properly mated, and have ample "runs." See that proper food is given to keep up the tone and general health of the stock. We have bought both hen and duck eggs during the past season from reputable dealers, or at least their "fads" were in reputable poultry journals, with the poorest of results.

In one case out of forty eggs, only one lone chick was hatched, and that one lone chick died in less than twentyfour hours. Shells very thin, eggs unfertile-showing improper food, handling and mating.

In another case forty duck eggs turned out eighteen ducklings-balance of the forty, excepting two, unfertile. A batch of forty duck eggs now hatching show more than fifty per cent. unfertile. These and other drawbacks confront the beginner.

But the second year, the beginner can then use eggs for hatching from his own fowls. If then, they are unfertile or defective, it is his fault. The first year such things are misfortunes; after that they become faults.

With good pure water and air-as pure as can be found

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anywhere-proper food, shelter and care, poultry-raising will pay as well here as anywhere.

We have the Washington market at our doors-only two hours' drive, with steam, and a ready sale for all first class articles. A fat cow, calf, sheep, pig, duck, chick, eggs, butter, hay, corn, etc., find ready sale at all seasons of the year.

Poultry seems, so far, to be perfectly healthy. The cost of feed is quite high, and it is going to be necessary for the poultry grower to raise, at least a portion of the poultry food. Corn, wheat, oats, Kaffir corn, millet, sunflowers, etc., can all be raised, and are being raised here successfully.

At one time in the history of the United States Fairfax county led the procession as a wheat-growing county. Washington himself was one of the largest wheat growers, and owned his own grist-mill. Considerable wheat is grown here yet, and the acreage seems to be increasing The crop this year was fully an average crop-say, fifteen bushels to the acre, and was secured in the best possible condition. The hay crop was only an ordinary one as to yield, but fine as to quality. Spring oats, owing to warm, dry weather at maturing time, were light as regards the grain, but fair as regards straw.

Much land is changing hands, owing largely to the exodus from Washington. The farms in our immediate section of the county are small, from twenty to fifty acres each, and from our home, we can converse easily with six neighbors in their homes; one family from Scotland, and the others representing Wisconsin, New York, Virginia and North Carolina.

The electric roads-three in number-and the three steam railways, intersect the county thoroughly. Other lines are under consideration. The county has a future both agriculturally and industrially. We are not expecting to make a fortune out of poultry; but we expect to live longer and easier than in the crowded cities. We have our own butter, milk, cream, eggs, chickens, hay, oats, corn, potatoes, fruits and vegetables. We have purest of air, and the finest of spring water.

We are going to credit up the poultry business with about \$500 a year on account of better health secured.

A. JEFFERS.

Fairfax Co., Va.

VIRGINIA POULTRY ASSOCIATION.

Editor Southern Planter:

Please let your readers know that the Virginia Poultry Association, Inc., has secured the services of Judge R. L. Simmons, of Charlotte, N. C., to officiate at our next annual show, December 7-12, 1908. We consider ourselves very fortunate in securing the services of such an able and efficient judge, backed, as he is, by eleven years' experience in judging at poultry shows, and in a recent contest, to determine the most popular Southern judge, Judge Simmons was second in the count.

Besides having a competent and fair-minded judge with us this year, the present indication, early as it is, points with unmistakable certainty to the largest and best exhibit of pure-bred poultry ever held in Virginia, and will, we believe, eclipse all of our previous efforts.

W. R. TODD, Secy.

POULTRY KEEPING ON A CITY LOT.

Editor Southern Planter;

Herewith I hand you report on my poultry keeping for . the first six months of 1908, on a half-acre city lot: 1908.

an. 1. Stock on hand (old fowls)	256
uly 1. Stock on hand (old fowls) 147	
Chickens 90	
	237
Stock sold	121
Eggs laid January to July	9,747
Eggs sold and set	\$236 73
Stock sold and breeding	64 85
10 barrels manure, &c	7 40
Total receipts	308 98
Expenses for feed, oil, etc	108 36
Net income	\$200 62
R. H. HA	RRIS.

Newport News, Va.

LARGE VS. SMALL BREEDS.

Editor Southern Planter:

While I am not a subscriber to your paper, my brother is, and I enjoy reading it very much. I have just read with interest "Poultry Notes," by Mr. Husselman, and like many others, he recommends the small breeds as egg producers. I have tried the different breeds mentioned in his article, and have discarded all others, and settled on the Barred Plymouth Rocks. They can be made to produce as many eggs as any other breed, and are much better winter layers than the Leghorn. Much can be said in favor of this large, hardy breed. (I have none for sale.) They are healthy and strong from the start, easy to control, and when full grown and fat (hens should be kept fat all the time) will weigh from seven to nine pounds. We all know it pays to tell the truth, and we also know that some men have more truths to tell than others. My hens will average more than 200 eggs each per year, and they are given two months rest each year (July and August). As to the large breeds losing time when they get broody, that is quite easy to control. We never allow ours' to get broody, except in rest time; then we take no notice of them, and they get over it in a few days.

C. M. COWLES.

James City Co., Va.

LAME DUCKS.

Editor Southern Planter:

In the July issue of your valued journal I noticed some of your readers are having trouble with lame ducks. The cause is too much soft feed and want of grit. The remedy is very coarse sand one pint to each gallon of soft feed night and morning. Have the sand free from dirt and feed regularly, and you will never have any lame ducks. We have about 125 Pekin and Rouen ducks, and have not nor have we had any lame this season.

MONROE GROVE POULTRY FARM. Loudoun Co., Va.

The Horse.

NOTES.

W. J. Carter. "Broad Rock."

When the September issue of The Planter reaches most of its subscribers the fairs and race meeting of the Virginia-Carolina Circuit will have begun and a more prosperous outlook has not been witnessed for many years past, in spite of adverse financial conditions prevailing since last fall. This is something to be regarded with satisfaction apart from the ordinary. Not only do these conditions prevail with members of the circuit in question, but a like report comes from other Associations of more or less importance in Virginia especially. The Virginia-Carolina Circuit opens up at Galax, September 2, 3, and 4, to be followed up in regular succession each week by Radford, Tazewell, The Great Roanoke Fair at Roanoke, the Interstate Fair, at Lynchburg; the Virginia State Fair, at Richmond, whose dates are the entire week of October 5-10, after which the scene shifts to North Car-Carolina soil, and Raleigh furnishes many attractions for the State Fair on October 12th to 16th. Charlotte follows Raleigh, after which comes the time-honored South Carolina State Fair, at Columbia. Fairs and race meetings in direct succession will also be held at Sumter and Spartansburg, S. C. and Augusta, Georgia, though these three places are not members of the regularly organized Virginia-Carolina Circuit. Not only have liberal purses been provided all along the line for harness races, but the run ners have been well looked after, too, which is fitting, as their performances both on the flat and over the jumps furnish sport and diversion for many even those whose allegiance to trotters and pacers is too strong to be doubted. The stake events for runners at Roanoke deserve special comment, as do the liberal purses offered at Lynchburg while at Richmond the purses range from \$300 to \$400 each with an aggregate of about \$3,000 more money which is probably more for both steeplechases and races on the flat than has ever been hung up at any Southern Fair.

The prize list of the fourth annual exhibit of the Petersburg Horse Show Association has been issued and quite a neat publication it is, typographically and otherwise. The Petersburg Horse Show has assumed important proportions and is now recognized as one of the most attractive in the Virginia Circuit of open air affairs of the sort. The dates for 1908 are September 11th and 12th, and prizes aggregating about \$2,000 are offered for hunters, jumpers, park saddle and harness horses. The Show will be held as usual at the beautiful grounds of the Riverside Hunt Club, near the city, and a trip there offers many attractions. From its inception the Petersburg Horse Show has been favored with the patronage and and Hawsflight. Hawkswick is a son of St. Simon and support of the Cockade City's influential and prominent classes, with liberality and public spirit on the part of the management. The officers are: W. Gordon McCabe Jr., president; Dr. H. G. Leigh, vice-president Hon W. Alexander Hamilton, 2nd vice-president; George Harrison, secretary; James McIlwaine Ruffin, treasurer and LeRoy Roper, manager.

Alamance Farm, of Graham, N. C., for many years past one of the largest and most prominent breeding establishments in the State, has decided to dispose of the larger portion of the herd of Shetland ponies owned there, and will offer at public auction, Thursday, September 3rd nearly 90 head of geldings, yearlings and two-year-old fillies, stallions and brood mares. Among the brood mares are some of the choicest on the farm, ten of which have foals at their sides and have been bred again. Most of the brood mares and young things are by champion prize winners. The Alamance herd of Shetlands is one of the best known in the South, but the health of Mr. L. Banks Holt, owner and founder of the establishment, is such that it has been found necessary to curtail affairs at the farm, otherwise many of the ponies now to be offered would not be parted with at any reasonable price.

Kapella, the chestnut filly, two years old, by Kavalli 2:0734, an elegant pacing son of the famous Kremlin, is doing well in the hands of her owner, William Newsome of this city. Her dam is Malula, by Mazatlan, 2:263/4, som of Electioneer and Rosemont, by Piedmont, 2:17, and she out of Beautiful Bells, the wonderful producing daughter of The Moor. Kapella is a pacer and promises to make speed with development. The daughter of Kapella was bred at Allen Farm, Pittsfield, Mass., from whom she was purchased by her present owner.

H. Flippen, of Charlotteville, Va., has won several races recently in Canada with the chestnut gelding, Woodside. 4, by Norwood, dam Bell Andrews, by John Happy, among the victories being the handicap steeplechase at Fort Erie where the Virginia bred horse defeated Lights Out, Economy, Pick Time, Impertinence, and others in fast time. Before the race Flippen was not anxious to start Woodside, so tried to get the son of Norwood excused from starting, but on being informed that he would have to pay to scratch McLain was ordered to mount the chestnut gelding, who starting at 16 to 5, won by nearly three lengths.

Imported Hawkswick, the English stallion that runs as premier at the Blue Ridge Stud, of Henry T. Oxnard, at Rectortown, Va., has another two-year-old winner to his credit in Col. Zeb, who won a five furlongs race at Fort Erie, defeating Stowaya, Anemonella and eight others, in 1:03. Previous to the performance of Col. Zeb, Hawkswick was credited with a half dozen winning two-yearolds in Roulon, Hawkwing, Havre, Disagreement, Cheek Plaisenterie, by Wallingtonia, and imported in 1902 by Mr. Oxnard, who kept the brown stallion several years in California before bringing him to Virginia. Among Virginia thoroughbred sires the Ellerslie stables Fatherless, son of Isonomy and Orphan Agnes, stands next to Hawkswick, with four of these precocious youngsters to his credit, including Alice, Orphan Boy, Blameless and Chipmunk.

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DURATION OF HEAT IN MARES.

Editor Southern Planter;

There seems to be a very general lack of accurate information among horse breeders as to the duration of heat in mares as well as the length of the intervals between heats. The following statement, therefore, of the physiological facts in the case with the practical deductions from these facts, may prove of interest to some of your readers.

In mares, as in other mammals, the Graafian vesicle containing the ovum makes its way when mature to the surface of the ovary, where it bursts, liberating the ovum, which escapes on the exterior of the ovary. The ovum passes into the Fallopian tubes, and from thence into the uterus, where fecundation takes place upon contact with the spermatazoa contained in the seminal fluid of the male. In animals whose capability of being impregnated occurs at regular periods, as in the mare, the Graafian vesicles and their contained ova appear to arrive at maturity, and the latter to be discharged, at such periods only. The periods at which the matured ova are separated from the ovaries and received into the Fallopian tubes is indicated by the phenomenon of heat. The ovum if not fecundated, eventually perishes, and disappears from the uterus. The ovum of the mare apparently retains its vitality for a considerable number of days after the period of heat, as it has been found possible to artificially impregnate mares at almost any time. The period of heat in mares, as a rule, occurs every twenty-one days, but in some cases at longer intervals, the maximum being about twenty-eight days. The length of the interval between heats is counted from the first day of one period to the first day of the next The period of heat, according to most authorities, lasts from two to five days, but the experience of breeders would indicate a longer duration, occasionally extending to ten days. Mares do not accept the stallion nor become impregnated naturally except during their periods of heat, which-usually cease after conception has occurred. The practical deduction from the above physiological facts is that after being bred to the stallion the mare should be returned to him only when she shows evidence of being in season after a lapse of about three weeks, or the mare, as a matter of precaution, may be tried again from the eighteenth to the twenty-first day, whether she shows evidence of being in season or not. A mare will accept the stallion between the third and the twelfth day after foaling, but will almost invariably be found in season on the ninth or tenth day, the custom of the great majority of breeders being to breed their mares at that time.

From the above it will be seen that there is no warrant whatever for the common practice of trying mares to the stallion on the ninth day following coition, and that where traveling stallions are accessible at certain points every nine days only, the best practice is after the mare has once taken the stallion, to send her to be tried to him on the 18th day following, and at subsequent periods of eighteen days, until it is safe to suppose that she has become stinted.

H. C. GROOME.

Editor Southern Planter;

The discussion of the farm horse is certainly timely. Let us consider what sort of a horse we are talking about.

The farm horse is an engine to propel implements and machinery. The essential points to be considered are: 1. In raising a horse, what will it fetch. 2. How much power will it deliver?

1. Except in such few cases where a special business is made of raising roadsters, coachers and race horses, the farmer breeds from the mares he uses for farm work Will a 900 lb. horse sell for as much as a 1500 lb. horse? Certainly not. Then why raise the cheap stuff.

2. Will a 2, 4 or 6 horse team of light horses pull as wide a double action disk, as wide a drill or harvester as many plow bottoms, as heavy a load of grain or hay as a team of the same number of heavy horses. Assuredly not! If you say that a man having light horses may hitch more of them to the gang plow or other implement I answer that there is a limit to the number of horses one man can conveniently handle. If a man handles six small horses to the gang plow—which is practical—he might as well handle six large horses and do more and better work.

When Prof. Massey tells us that in his sandy section large horses are not needed, I would ask him how much work he does in a day? I am not farming now but I have plowed many hundred acres of sandy soil with four big horses, using as many as four bottoms for fallowing and when the learned gentleman uses a wide double-action disc, a wide drill, a heavy load of manure on the spreader a wide harvester or is trying to do as much work in a given time as a man can and should do, he will find that four big horses will enable him to do more work than 4 little 900 lb. runts.

A man's value depends upon the amount of work he does. Even to a double-row corn planter with check cable, I would rather have two big horses, because it is quite a pull. For the farm give me four big horses to the gang plow, to the double-action disc, to the big drill and to the wide harvester and, in cultivating corn, divide the team and have two horses, not runts, to the double riding cultivator. N.

NON-STANDARD TROTTERS AT THE STATE FAIR. Editor Southern Planter;

As the State Fair Association has opened classes for non-standard trotters, or as they are termed in their catalogue, "General purpose horses" those who have been and are standing trotting bred stallions for public service should make a strong effort to have their stallions represented at the Fair by some of the best colts and fillies sired by them out of unregistered mares as well as registered mares.

The Virginia people have the name of being far behind times. If so they ought to wake up.

Let each and every one of us do something, be it ever so little, towards trying to make the Virginia State Fair one among the most complete in the U. S.

K. A. BERGMANN,

Chesterfield Co., Va.

Miscellaneous.



SCENE AT CURL'S NECK. INSTITUTE ME MBERS BOARDING WAGONS FOR INSPECTION TOUR.

THE VIRGINIA STATE FARMERS' INSTITUTE.

The fifth annual session of the Virginia State Farmers' Institute was held in Richmond, Va., on August 4th, 5th and 6th, in accordance with previous announcements. We are very happy to say that the meeting was an unqualified success in point of attendance, programme provided, and the entertainment given on the last day of the meeting. President T. O. Sandy, of Burkeville, Va., presided, while Secretary-Treasurer J. L. Moomaw, of Cloverdale, and Assistant Secretary J. M. Williams were at their posts, attending to their respective duties.

It would be a tremendous task for us to undertake to publish in full the various addresses and papers which were read before the Institute. This will all be printed in book form and distributed to the members in due course and we suggest that any farmer who is not a member of the Institute send the Secretary a dollar and become one, and receive a copy of this annual report. It will be worth the money many times over.

The sub-committee appointed from the General Institute Committee last May to look into the advisability of incorporating the institute, reported unanimously in favor of such a move. The Institute adopted the report of its committee and authorized the same committee to proceed with the work of incorporation. In talkling with members of this committee, we gathered that their idea is to make the Institute on the order of a Chamber of agriculture, corresponding with Chambers of commerce existing in cities and towns. In addition to county vice-presidents, their idea is to have standing committees from the Board of Directors, to have charge of different branches of work, such as the Institute work proper, farmers' grievances, legislative, etc., and to which farmers may come for assistance and advice at all times, on any matter of sufficient importance to affect the general welfare of the farmers of the State. It is further suggested that the Institute shall hold its annual meetings in different parts of the State, thereby keeping up interest in the various sections. However, these suggestions

are only tentative, and may be modified or enlarged when the committee gets to work on the matter of incorporation.

One of the most delightful features of the session was an all-day excursion down the James river to Curl's Neck Farm, the estate of C. H. Senff, Esq., of New York. Through his courtesy, and that of the Richmond Chamber of Commerce, the entire membership was permitted to inspect this magnificent farm, and also to enjoy the trip down the historic James as far as Westover. A delightful lunch and refreshments were served on the boats, and the whole day's outing did not cost the members of the Institute a cent.

On arriving at Curl's Neck, each boat was met by Mr. George W. Bedell, the courteous manager of the farm,



Hart-Parr Steam Plowing Outfit at work at Curl's Neck--Exhibition for Farmers' Institute.

who had some twenty odd wagons in which the members were driven over the farm, and their inspection of it was most thorough and critical, and nothing but exclamations of surprise and delight were heard at the magnificent scale on which things were conducted. When it is considered that there are 3,000 acres under cultivation ,and over 300 acres in alfalfa alone, some idea may be gathered by those who did not attend, as to what there was to see. The plots were all plainly marked, and everybody was furnished with a printed folder giving detailed information as to the various fields so each could see for himself what is being done. A novel sight, to be seen on few other farms in the State, was a steam plowing outfit at work. The machine used was a Hart-Parr Kerosene traction engine with a section of disc plows attached. Mr. Horace L. Smith, of Petersburg, agent for this section, was on hand explaining its detail to all interested inquirers. We learned that the kerosene tractor is preferred over the steam tractor because it is so much lighter, and does not have to carry a heavy boiler. The engine used was a forty-horse-power one, which required only eighteen-horse-power to propel itself, leaving twentytwo horse-power for drawing its load. This engine has two cylinders developing twenty horse-power each, and either one can be worked independently. Another feature of this engine is that it will consume about thirty-five gallons of oil in ten hours as compared with a ton of coal required for a steam engine.

The officers of the Institute and the Programme Committee have every reason to be proud of themselves, and are certainly deserving the congratulations of the farmers for arranging such a helpful and entertaining Institute. It is hoped that the membership will be doubled by next year, as it has practically been every year since its start. More than one thousand members were enrolled during the meeting.

THE VIRGINIA STATE FAIR, RICHMOND.

October 5-11, 1908.

The season of fairs has arrived. A number will be held this month, while early in October will take place the Virginia State Fair, for which great preparations are in progress. For weeks General Manager Mark R. Lloyd and his office force have been at work at No. 819 East Main street, Richmond, and much matter pertaining to the fair has been sent out. Thousands of copies of the premium list have been distributed, and many letters requesting information answered. 'The correspondence is growing, and every day will bring its work from now until"

To Richmond the week of the Virginia State Fair will be the most important occasion of the year, while to the people of Virginia it is the one event to which all look forward with feelings of the greatest anticipation. It will be their opportunity to visit the capital city and commingle with their city brethren; to see the best products of the State on display; and to marvel at her wonderful resources and progress.

That Virginia should be seen at her best through the medium of the State Fair, it behooves every citizen to be moved with patriotic inspiration, and lend a hand to bring about the desired result. Every citizen can do something, and, especially every farmer, whose exhibition it is. The finest horses, the best cattle, the popular breeds of

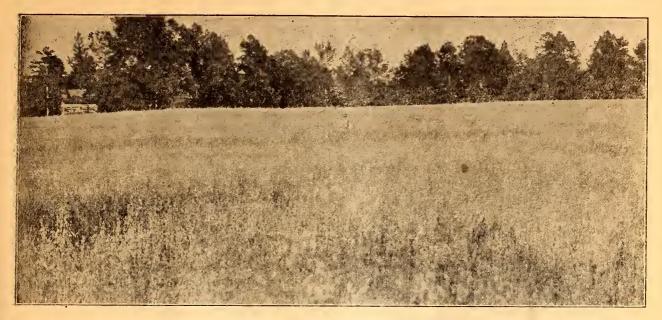
poultry, and the choicest farm products should be brought to the fair, and every department filled to overflowing. The year has been favorable, the farmers are prosperous, and all can devote some time to making the State **Fair** a success.

The premiums are entirely adequate to stimulate a large display in each department. There is no other fair association in the South, with perhaps, a single exception, that offers more money as a whole, and certainly none more liberal in its appropriations for live-stock exhibits. The premiums for farm products—grain, fruit, and vegetables—are, also, very encouraging as well as those for domestic articles and ladies' fancy work.

In order that proper arrangements can be made for all exhibits, the officers of the fair should be notified in time. For that reason, dates preceding the fair have been selected for the closing entries. For instance, the books of entry for horses, cattle, sheep and swine will close on Monday, September 21; for poultry, domestics, manufactures, fancy work and art, on Wednesday, September 23d; farm products, horticultural products, plants and flowers, Friday, September 25th; and for dairy products, implements and machinery, on Monday, September 28.

In view of the interest that is being taken in many sections in getting up county exhibits, for the purpose of winning the premiums of \$50 and \$25, for best collections of farm products; and of \$100 and \$50' for best display of fruits; and, in consequence of the action of the State Horticultural Society of Virginia, in deciding to use part of the appropriation granted by the General Assembly of Virginia in getting up a creditable display of fruit, it is possible that additional accommodations will have to be provided for these classes of exhibits. Thesame may be said in regard to the prospects for an elaborate poultry display, as the Virginia Poultry Association has issued an appeal to all members to exhibit their birds at the coming State Fair. In case of necessity large tents. will be provided, in addition to the commodious buildings.

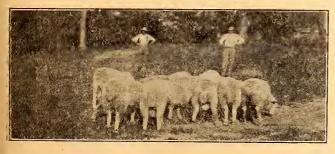
For the entertainment of the general public and all visitors a programme of first-class amusements is being arranged. Among the extraordinary free attractions will be Pawnee Bill's Great Wild West, one of the most realistic shows in existence, with its host of Indians, cowboys, soldiers and rancheros; also a grand display at night of Pain's fireworks, with magnificent set pieces and concluding with a spectacular representation of the "Siege and Bombardment of Port Arthur." As an indispensable adjunct of the fair a very complete racing programme has been provided for each day. There will be five days' of harness and running races-thirty races inall (ten harness and twenty running, the latter including five steeplechases); and on Saturday, the fair will close with a special programme of automobile races and various outdoor amusements. All in all, the Virginia State Fair of 1908 will be most instructive and entertaining, and the assurance has been given by the management that there will be no objectionable features. The dates of the fair should be kept constantly in mind-October 5, 6, 7, 8 9, 10 and 11. Copies of the premium list can still. be had by writing for the same.



FIELD OF WINTER OATS, STATE TEST FARM, SAXE, VA.

THE TEST FARM-DEPARTMENT OF AGRICULTURE

Some years ago the county of Charlotte gave a farm to the State Board of Agriculture for the purpose of conducting tobacco and other experiments for the benefit of the farmers in that section of country. The farm selected contains some 500 acres, extending from the Little Roanoke river back up through considerable table land and bill country, at Saxe, on the Southern Railway. While not an ideal farm for experimental work, there is a great deal of it which is suitable for raising both bright and dark tobaccos—a rather unusual condition. Less than a year ago, the Test Farm Committee of the Board appointed Dr. E. W. Magruder, the chief chemist of the Department of Agriculture, as director of the farm, and under his supervision a vast amount of preliminary work has already



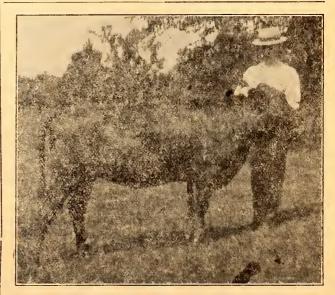
Pure-bred Dorsets-State Test Farm, Saxe, Va.

been done, including cleaning up, ditching and draining. Hillsides too steep for test work have been rapidly gotten into grass to prevent washing and gulleying—quite an object lesson. Fields and plots have been laid out for crop rotation and experiments, and everything, it may be said, is in a fair way to do some valuable work.

Some Experiments.

Both bright and dark tobacco is now being tested. There are nineteen plots of the former, and ten of the latter.

Different combinations and quantities of fertilizers are being used, in order to ascertain just what kind and how much will give the most profitable results. While these experiments have to be carried on through a series of years to show conclusive results, yet it is noticeable that in some experiments already conducted, that phosphoric acid produces by far the best results, and that ammonia and potash produce little or no results when used without phosphoric acid. Again, when all three are applied, better results are obtained than by the use of phosphoric



Red Poll Heifer-State Test Farm, Saxe, Va.

acid alone. On these plots wheat will follow tobacco and grass will follow wheat in order to demonstrate the residual effects of the fertilizer. Variety tests of tobacco will be instituted, and should prove most interesting.

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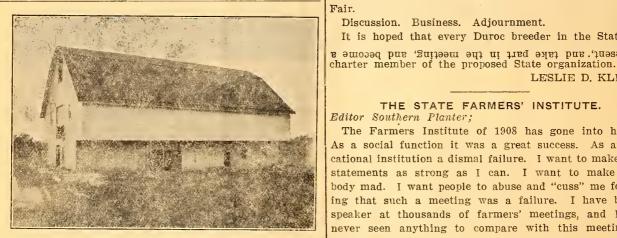
Wheat and Oats.

Extensive variety tests with both grains are being conducted in order to determine the best sort for that section and soil. This fall, fertilizer tests will also be started. The value of these tests is apparent. As an example, we might cite the fact that in oats, the Black Tartarian has lead all spring varieties in yield for the past two years.

Corn.

Last year fifteen varieties of corn were tested, and the test is being repeated this year, with the addition of five varieties. These tests will be continued from year to year, with the addition of other meretorious sorts. Cocke's Prolific lead in yield last year.

We might say in passing, that the strictest care is exercised in selecting seed corn, all selections being made in the field while on the stalk. After it is gathered, it



Combination Hay and Stock Barn-State Test Farm, Saxe, Va.

is subjected to another rigid examination. The selected ears are then planted in a seed patch, each ear in a row to itself. Alternate halves of these rows are detasseled, and all inferior stalks removed. The seed for the following year is selected from the detasseled parts of the row. The fodder and corn from each row are weighed to determine which parent ear produced the greatest yield. Grasses, Alfalfa and Clovers.

Plot and field experiments are now being conducted with these valuable grasses both alone and in combination. There are now twelve plots of grasses with more to be added this fall. In making these experiments, lime as well as fertilizer is being used, and subsoiling is included in the thorough preparation of the land. There are now 180 plots of field crops under observation, and there is little doubt but that some valuable lessons will follow the tabulation of results.

CALL FOR MEETING OF DUROC-JERSEY BREEDERS

There will be a meeting of the breeders of Duroc swine in Richmond, on Wednesday, October 7, 1908, at Murphy's Hotel, at 7:30 P. M., for the purpose of organizing a Virginia Duroc Swine Breeders' Association. The following programme has been arranged for that occasion:

Organization Address-Leslie D. Kline, Vaucluse, Va.

Organization-Election of Officers.

Standard of Duroc Swine-Mr. E. H. Tyler, Dublin, Va., and Frank A. Lovelock, Lynchburg, Va.

History of the Duroc Breed-Dr. Walter J. Quick. Professor of Animal Husbandry, Blacksburg, Va.

Advantages of Durocs over other Breeds-C. L. Shenk, Luray, Va.

Discussion-R. W. Watson, Petersburg, Va.; Walter M. Carroll, Lynchburg, Va.

How to Develop Breeding Hogs-Hon. J. H. C. Beverly, Chance, Va.

The Sanitary Care of Swine, Dr. J. G. Ferneyhough Burkeville, Va.

The Brood Sow and Her Litter, Mr. C. B. Pickett, Worsham, Va.

Discussion-Mr. Floyd, Bridgetown, Va.

How to Improve the Hog Show at the Virginia State Fair.

Discussion. Business. Adjournment.

It is hoped that every Duroc breeder in the State will be present, and take part in the meeting, and become a

LESLIE D. KLINE.

THE STATE FARMERS' INSTITUTE.

Editor Southern Planter;

The Farmers Institute of 1908 has gone into history. As a social function it was a great success. As an educational institution a dismal failure. I want to make these statements as strong as I can. I want to make somebody mad. I want people to abuse and "cuss" me for saying that such a meeting was a failure. I have been a speaker at thousands of farmers' meetings, and I have never seen anything to compare with this meeting for sociability and hospitality. Nowhere, except in the Old Dominion could men and cities be found with that broadgauge hospitality shown to the farmers at this meeting by the City of Richmond and the proprietor and manager of Curl's Neck Farm. The trip down the James on the splendid steamers, the splendid entertainment, the limitless hospitality, the substantial and ample luncheon, the courteous treatment at the great plant known as Curl's Neck, are beyond comprehension, except to those who saw and heard, and ate. None but men of large and liberal hearts and minds could conceive and carry out such a plan. Such a treat to the farmers of any Commonwealth, every thing first-class, clean, moral and befitting the occasion. No one can, in words, do justice to such a feast of good things as the farmers had spread for them on this trip The very elements seemed to conspire to make it an occasion to linger in the memory of every participant. None but a base ingrate could say a word against any feature of this part of the programme of the State Farmers' Institute.

The educational part of the programme is what I want to see improved. I do not criticise the management, the officers or the speakers. I simply want to try to point out a better way. The State should appropriate the money necessary to hold a two days' meeting in every county in Virginia. These meetings should be held during December, January and February, and should be located in the most accessible points in the various counties. The local-

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ity where the meeting is held should furnish the hall or room for the meeting. The State should pay the expense of advertising, and furnish two practical, experienced speakers. A local organization in each county should be chosen at each meeting to serve one year. This local organization to consist of a chairman, secretary, treasurer, and a committee of three or five to formulate a programme for the next meeting. The date of these meetings should be arranged in groups of three continguous counties, to enable the State speakers to attend this series of meetings conveniently, and at the minimum of expense. This will enable the management to furnish practical speakers, competent to teach the people in the various localities, the newer and most practical methods known to them along the lines of the special crops, soils, fertilizers, live-stock, horticulture, grains, grasses, trucking, poultry, etc., that would interest and be helpful to the people of that particular locality. Hold five sessions at each of these meetings. Four day sessions and one night session. Limit the time of these sessions to two and one-half hours each, and make your programmes short, concise, practical. Have your programme arranged by topic, and confine the discussions to this topic. Thus: Monday, August 3d, 9:30 to 12 -The Soil. Monday, August 3, 1 P. M. to 4 P. M .- Fertilizers and Manure. Monday, August 3, 7 P. M. to 9:30 P. M.-Education for Farmers. Tuesday, August 4, 9:30 to 12 P. M.-Feeds and Forage. Tuesday, August 4, 1 P. M. to 4 P. M.-Live Stock.

These topics can be subdivided, and a limited time allowed for discussion. The topics can be varied according to the need and industry of the locality. Many people do not have time, and some do not desire to attend all the sessions, and with this arrangement they can give their time and attention to the session most interesting to them. Better interest, better attention and better order will follow such an arrangement. The Institute must be taken to the people. Virginia has a population of over 2,000,000. One-half of her citizens are engaged directly in agriculture, and all of them are dependent upon the prosperity of the farmers. Less than one per cent. can and do attend the State Institute. With an institute held in every county the masses would attend, and in a very short time fifty per cent. of the rural population would attend these meetings. One man put it in this very practical way: "It will cost me about \$25 to attend this meeting. I would rather pay that amount to have an institute in my own county. Then my wife and four boys could attend."

The cost of holding such meetings need not exceed \$40 per county. Some may think this would be paternalism. The State maintains other educational institutions. Why not an institution that lies at the very foundation of all education, of every great and legitimate enterprise, and is the fountain-head of all industry, the cradle in which every really great man and measure has been rocked and nurtured since the day of Washington. It is the product of the farm that turns the wheels of every enterprise, that puts the idle cars in motion, that fills the great ocean freighters, and brings the gold of other countries to fill the coffers of our beloved Uncle Sam.

Let us have an appropriation of \$5,000 per year to start this work. Let us make every session a business session.

Bar every kind and character of graft, politics, advertising and selfishness from the Farmers' Institute. Leave exhibits of fruits and machinery to the fairs and see us grow.

CAL. HUSSELMAN.

THE VIRGINIA STATE FARMERS' INSTITUTE MEETING.

Editor Southern Planter;

Having attended every session of the late annual meeting of the Virginia State Farmers' Institute, the undersigned was greatly interested in its proceedings; especially, as with his friend, Prof. S. B. Heiges, who also attended the Institute, he was connected with such work in Pennsylvania for a number of years. Prof. Heiges has become a Virginian, having located upon a farm of some 350 acres in Powhatan county, which he bought several years ago.

It was to be regretted that the acoustics of the hall in which the sessions were held were bad, and what with the restlessness, in consequence, of some members, and the reverberations from the lobby where loud conversations were continuous. It was difficult for those in the central and rear portions of the hall to hear the speakers. It was no wonder, therefore, that some were compelled to speak at a high pitch, or to yell, as Husselman, "the hen man," said, loud enough to be heard "down at the Union Station."

Another matter which should be remedied when the Institute again meets, is that some of the subjects took too much time, in view of the lengthy programme, through the desire of members to interrogate the speakers. Thus discussions ensued, which became protracted, and unduly lengthened the sessions. To guard against this a "query box" should be provided, to receive slips containing questions to which answers are desired, and at the close of each session the queries should be referred to those competent to answer, the answers to be made at the next session.

A matter of still greater consequence in embarrassing the Institute was the consideration at a State gathering of topics, which interested certain districts more than others, and which filled the programme with too many subjects, and crowded into the sessions of two days what should have been given at least three days' consideration. If institutes were held in districts, or, better still, in counties, the programmes could be adapted to the respective interests of the several sections. Thus, in the tooacco belt matters pertaining to the tobacco industry could be made paramount. The same could be done in the Tidewater section, where truck farming, peanut growing and other interests hold sway; in the Piedmont district, where fruit culture is coming to the front; in the Northern tier of counties and the "Valley of Virginia," where dairying is engaging much attention; and in the Southwest, where the raising of beef cattle, sheep, lambs and hogs for market engross the farmers.

When the Farmers' Institute movement was inaugurated in Pennsylvania twenty years ago, it was confined to a few counties, and conducted on the lines of teachers' institutes, which for many years had been popular in the State. These farmers' institutes were conducted under

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the direction of the State Board of Agriculture, and proved so effective in bringing about good results that the present Department of Agriculture was an outgrowth. Where formerly the sum of \$5,000 was considered sufficient to conduct the operations of the State Board of Agriculture. the most of which went for salaries, the lectures at farmers' institutes paying their own expenses, over \$100,000 is now expended per annum in carrying out all the work of the Department of Agriculture. One of the most important divisions is that of "Economic Zooology," which is engaged in fighting the insect pests and diseases of grain, fruit and vegetables that annually cause such great losses to the farmers. Another division that is doing great work is that of "Dairy and Pure Food," while the regulation of the industry of "Commercial Fertilizers" has been of great value. The last mentioned more than pays for itself -the licnse fees that must be paid by manufacturers of festilizers and agents, and in the receipt of fines and penalties imposed for violation of the laws on the subject.

According to a letter just received by the undersigned from the Hon. A. L. Martin, Secretary of Agriculture, and Director of Farmers' Institutes, the Pennsylvania Legislature appropriated \$20,000 for carrying on institutes doring the coming session. The number of days of institutes is 400, a number being held on the same day. The session begins November 27th, and ends March 15th. The number of lectures already assigned is sixty-eight, to which must be added many local lecturers and essayists in the various districts where institutes are held. Three or four State lecturers are sent to each institute, and there are sixty-seven managers, or one for each county. The managers serve without pay. In the more populous counties five and six institutes are held, mostly of two days' duration each. Thus every locality in the State can receive instruction on any special line in which it is most interested. In addition to these local institutes, the State Board of Agriculture, which is still in existence, notwithstanding the organization of the Department of Agriculture, holds several meetings each year, which are conducted in the nature of institutes, and the directors and lecturers of institutes hold an annual meeting, covering three or four days, in which their work is reviewed, and topics are discussed.

The undersigned was greatly pleased with the remarks of the Hon. Henry C. Stuart, President. of the Virginia State Fair Association, who, on the first day of the Institute, addressed the farmers of Virginia, who were assembled before him. He struck the right vein when he showed what good work can be accomplished by the State Fair in the promotion of agriculture and hortfeulture, and how important it is that the farmers give it their support. Himself a farmer by occupation, and large producer of export cattle, he was a proper exponent of the farmer's interests on this occasion.

Another feature of the Virginia State Farmers' Institute was the large number of counties represented. Of the ninety-eight counties in the State, there were representatives of sixty-five present. That the Commissioner of Agriculture, Mr. Koiner, has been doing good work was evident from the number of farmers, dairymen and truck growers in attendance who have located in Virginia in the

past few years. Swedish and Danish names were especially conspicuous, such as Ancarrow, Droste, Gulden, Jensen, Kinde, Lewisen, Larsen, Mistn, Munter, Madsen, Moren, Nallest, Olsen, Ragnak, Ribula, Troving and Tocton. A Norwegian name has even been given to one of the post-offices near which these foreign agriculturists have colonized, viz.: Norge. Of course, the trip to the wonderful Curl's Neck Farm was one of the greatest features of the Institute. But that's another story.

Richmond, Va.

CYRUS T. FOX.

WOOD ASHES AS A FERTILIZER FOR FRUIT TREES.

It is only roght that the farmer should, when possible, utilize every waste product on the farm. There accumulates around the house during the winter season a quantity of wood ashes, which are of some fertilizing value, their principal constituent of plant food being potash.

If these ashes have not been exposed to the rains (which will cause the very soluble potash to leach out) they may be used in the orchard to a good advantage. While ashes may be applied closer to the body of the tree than manures, they should not be banked too closely. One peck of strong, unleached ashes spread about a newly set tree is enough, while from one to three bushels should be used for a tree five years old and upwards. Ashes may be applied almost any time, and a good way is to carry the ashes to the orchard as they are removed from the stove.

Since potach is the valued element in wood ashes, and since it is also the one so much needed in the orchard (insuring early ripening, rich color and solid fruit) the farmer should see that it is only unleached ashes he applies. While it will be all right to use the amount made on his farm, it is not good practice to buy elsewhere. It means paying too much for the percentage of potash they contain, not to mention the expense of hauling. It is better and cheaper to supplement the home supply by using Kainit or high-grade muriate of potash. When these cannot be readily obtained, a fertilizer containing 2 per cent. nitrogen, 6 per cent, phosphoric acid and 8 per cent, potash may be applied. While such a mixture may be put under and around a newly set tree, it need not be put nearer than four feet of the body of a bearing tree. It should be applied to the surface and then turned under, so as to be placed down near to the feeding roots

Coal ashes are of little value except on wet lands, and that is the kind of land on which fruit trees should never be planted.

D. I. DUNCAN.

I do not know of any business for which there are better openings than fruit and truck growing. The rapid development of the great Southwest has given births to hundreds of towns and endowed them with a wonderful rate of growth. I think it will be generally found that fruit and vegetables are the last products to be locally supplied from the surrounding country. My observaion is net there is little trouble in finding a town of from one wousand population up to small cities whose demand for fruit and vegetables is not half supplied from its neighboring territory.

[September,

THE SOUTHERN PLANTER.

Southern Planter

1908.7

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B. MORGAN SHEPHERD, Business Manager.

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REMITTANCES should be made direct to this office, either by Regis-tered Letter or Money Order, which will be at our risk. When made other-wile we cannot be respensible.

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 er enquiries will receive attention. Address THE SOUTHERN PLANTER. RICHMOND, VA.

ENTERED AT THE POST-OFFICE AT RICHMOND, VA., AS SECOND-CLASS MAIL MATTER.



BANK UF KICHMÜ

Main and Ninth Streets.

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 30 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 these a useful device, as they always save their copies for reference.

The Wm. Galloway Co., starts its season's advertising with an attractive card in this issue.

The celebrated "Battle Axe" shoes, made by the Stephen Putney Shoe Co., are attractively advertised on another page.

The Kalamazoo Stove Co. is adver-tising its well known stoves and ranges on the "From factory to consumer" plan.

Bargains in farm wagons are offered by the Spotless Co., the South's leading mail order house.

The De Laval Separator Co., starts its fall advertising campign this month.

Drs. Hess & Clark have a prominent announcement of their stock food and other preparations on another page.

The Law Department of the Richmond College has an advertisement in this issue, of interest to legally inclined young men.

The Continental Plant Co. has its usual seasonable announcement on another page.

The Ohio Carriage Mfg Co. would like to send you its very interesting catalogue. Look up the advertisement.

Shetland ponies are advertised by Montrose Farm.

Pierson Bros. are offering some very valuable second-hand machinery.

The Coe-Mortimer Co. announces on another page that it is now in shape to handle fall trade in Peruvian guano and fertilizer materials.

Cambridge Corrugated Rollers are offered this month by R. F. Harris & Company.

H. W. Warner is offering very choice seed wheat. Send for descriptive circular and sample.

CAPITAL, \$1,000,000 00.

Hairy Vetch makes not only one of the largestyielding and best winter feed and forage crops you can grow, but is also one of the best of soil-improvers, adding more nitrogen to the soil than any other winter crop. Wood's Descriptive Fall Cat-alogue gives full information about this valuable crop; also about all other Farm & Garden Seeds for Fall planting. Catalogue mailed free on request. Write for it. T. W. WOOD & SOHS. Seedsmen, - Richmond, Va. (**Bell Hay Curing Rack** 180 FOR EADY (Patented October 15, 1908.) Solves the problem of curing pea vines, alfaifa er other hay almost re-gardiess of weather conditions, as the racks give interior ventilation and racks give interior ventilation and keep hay from touching ground, there-by causing it to cure out nicely when other methods fail. One handling com-pletes the work and the hay is safe. For prices and circular giving full particulars, address H. E. BELL, Burkeville, Va. Agents Wanted in Every County. - McKILLIP -

Special attention paid to out-of-town accounts. Correspondence invited. Three per cent. Interest Allowed In Savings Department. Compounded Semi-Annually,

801

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FOR

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WOOD'S SEEDS.

Best qualities obtainable.

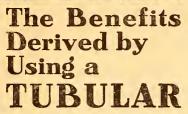
Winter or



SURPLUS, \$475,000,00.

THE SOUTHERN PLANTER

[September,



buys one, he wonders why he waited so long, to "get wise."

Don't you wait and then regret; but investigate, now, the superiority of

the Tubular Separator.

Easy filling-Waist low supply Easy innig-waist low suppry tank. Easy turning-Light running, self oiling gears. Easy cleaning-Simple (3-part) bowl. Clean skimming-Suspended bottom fed bowl. Durability-Made to stand wear bottom fed bowl. Durability-Made to stand wear and tear. Economy-Less attention-less repairs than other separators require.

These are some advantages found in the Tubular, only. To learn more write for Catalog 190.

The Sharples Separator Co., West Chester, Penna.

Toronto, Can. San Francisco, Calif. Chicago, Ill. CHAIN



0. H. ROBERTSON, No. 18 Camp Street, Forestville, Conm.



Parties interested in Red Poll cattle should refer to the advertisement of H. M. Luttrell.

Bloomfield Stock Farm announces a dispersal of its stock, including Percheron horses, Shorthorn cattle and Berkshire hogs. All farm implements, machinery, etc., are included.

Seasonable seed are offered by S. T. Beveridge & Co.

Valuable horse remedies are advertised by Wright Bros. See their advertisement.

Ellerslie Farm is offering some very choice thoroughbreds in addition to its usual monthly offerings.

Ground phosphate rock can be had of W. B. Alexander & Co.

The "Want" columns contain numerous opportunities for barter, sales, exchanges and positions.

BOOKS.

Robert E. Lee, by Philip Alexander Bruce, LL. D., author of Economic History of Virginia in the 17th Century, The Plantation Negro as a Freeman, Rise of the New South, etc. Pub-lished by Geo. W. Jacobs & Co., Phil-adelphia, Pa. This is one of the series of American Crisis Biographies, and will be welcomed by every Southern man, and especially by every Virginian. The author is himself a Vir-ginian of fine old lineage and thoroughly imbued with the Virginian's love of his native State and of her great characters, and amongst these no greater is to be found than Robert E. Lee-great in war and still greater in peace. No finer character than R. E. Lee ever lived, and the author has in this book so portrayed the man as to make him live before the eyes of the readers of his book, and the daily life so portrayed is one to make even those who have no especial interest in the character of General Lee love the man and admire the hero. Every Virginian ought to have the book in his library as an inspiration to the rising generation.

PREMIJM LIST.

Virginia State Fair, Richmond, Oc-tober 5, 6, 7, 8, 9, 10, 1908. Send to the General Manager, M. R. Lloyd, State Fair Office, Main Street, Richmond, for copy, if you have not got one, and see that you exhibit something and attend the Fair.

CATALOGUES.

United States College of Veterinary Surgeons, 222 C Street N. W., Washington, D. C .:

Kansas City Veterinary College, E. 15th St., Kansas City, Mo. Davidson, Burnley & Co., Richmond, Va., National Water Supply System. Every farmer should send for a copy of this catalogue. It will show him how he can have all the city conveniences in a water supply in his houes and on his premises.



Wheels, Freight Paid \$8.75 for 4 linggy Wheels, Steel Tires on. With Rubbe Tires \$10.20.1 mfc, wheels \$1 ot 4 n. tread Rubbe Tire Top Burgies, \$11, Harness, \$5. Write for catalog Learn how to buy direct. Repair Wheels, \$5.67 Wagon Umbreds FREE. W, V, 800b, Cincinnati,

are so many, that after a man

802



Our lives should be more pure.

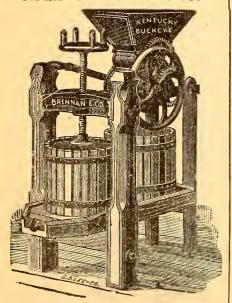
our Business Department.

Tell the advertiser where you saw his advertisement.

1908.]

OUF On our wonderful new Daisy SELF-THREAD-ING, self-feeding, one-horse hay press. It is the only one on the market on which one man can do all the work. This first success-ful self-threading device-greatest time saver ever. Condenser and open bars on bale hopper increase capacity and prevent fork catching. Five days: Generation of the second second second five days: Generation of the second second second five days: Generation of the second second second second five days: Generation of the second second second second five days: Generation of the second second second second second five days: Generation of the second seco **Fast Hay Baling** by using the machine that's easy to feed, the large feed hole **BALING PRESS** The only machine for long, coarse or matted hay. Balesperfectly Alfalfa, Peavines, Johnson and other grasses. Power increases as hay L.comes denser. Large charges, perfect folds, bell signal, f side tension grip. Callandsceit or write iori lustrated catalogue. 4) sizes and siyles. Colline Ploy Co. Quincy. Ille. Collins Plow Co., Quincy, Ill., 1185 Hampshire St. R 1 1 / 1 1 62

CIDER AND WINE MILLS



THE LATEST IMPROVED AND THE BEST MILL ON THE MARKET.

BEST MILL ON THE MARKET. They cannot be surpassed in quality, finish, durability and capacity. They have hard wood frames, heavy cast iron beams, and are handsomely fin-ished. The throat is adjustible so as to admit all sizes of fruit, and the grinding rollers are ground on the faces, are true to their centers, and are easily adjusted so close that no pulp can pass through without being thor-oughly crushed. The grinding appar-atus cannot be improved upon. Our complete catalogue giving prices on all sizes as well as our complete line of farm machinery sent free on request.

request.

THE IMPLEMENT COMPANY.

1302 E. Main St., Richmond, Va.

DISINFECTION AT FALL FAIRS.

As the fair season approaches and breeders are getting their herds ready for the circuit, it is perhaps well to say something about the arrangements that are made for maintaining sanitary conditions in the barns and show rings of the various State Fairs and Expositions. This matter is one that is very important, although there are doubtless many exhibitors who have not stopped to consider it seriously and take into account the benefit they derive from proper attention to these details. Where large numbers of animals from almost every part of the country are assembled, those from the East quartered alongside of those from the West, there is more or less chance of the introduction and spread of some contagious diseases. There have been instances of just such unfortunate occurrences, and to guard against a repetition of the trouble. most fair associations now arrange to have buildings and grounds thoroughly disinfected during the fair season.

We presume most of our readers have noticed the work done by Parke, Davis & Company at many of the leading fairs in past years. Kreso Disinfectant, manufactured by this company, is now recognized as the standard product of its kind, and the fact that it is used at fairs must always give the exhibitors of valuable stock a feeling of security. During the present season Kreso will be represented at the following fairs: Columbus, Ohio; Detroit, Mich.; Milwaukee, Wis.; Indianapolis, Ind.; Grand Rapids, Mich.; Syracuse, N. Y.; Huron, S. D.; Atlanta, Ga.; Danbury, Conn.; Des Moines, Iowa; Hamline, Minn.; Sioux City, Iowa, and Springfield, Ill. At some of these Kreso will be employed as the official disinfectant, and others will doubtless be added to the list later in the season. Moreover, Kreso has been used at some seventy-five leading Fairs and Expositions (including the International Live Stock Exposition) during the past few years. and we have never known of an outbreak of contagious disease upon grounds thus protected.

To those who are visitors but not exhibitors, the fact that Parke, Davis & Company will be upon these grounds with sanitary apparatus and a display of their Animal Industry Products, offers an opportunity for the visitor to acquaint himself with them, that should not be missed. The display will include, in addition to Kreso Disinfectant, Kreso Dip for general dipping operations. Blacklegoids for the protection of domestic animals against Anthrax, Azoa (Rat Virus) for the extermination of rats and mice with a material that is not injurious to domestic animals, Thermofuge, Tuberculin, etc. Almost every one has at one time or another, been very much in need of materials of this kind, or information regarding them. We would



[September,

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BARGAINS IN

2nd Hand Machinery. THE WATT PLOW COMPANY.

Richmond, Va.

- 1-25 H. P. Geiser Engine and Boiler on skids. In first-class order. 1-15 H. P. (8x10 cylinder) Pitts En-gine and Boiler. Mounted on steel
- wheels. -25 H. P.
- Geiser Engine. Mounted on 30 H. P. Botter on skids. Atmost new.
- 1—12 H. P. Kelly Englne and Boiler on wheels in first class order.
- 1-15 H. P. Frick Engine and Boiler on wheels. 1-No. 1 Lan
- on wheels, -No. 1 Lane Saw Mill with Rich-mond Iron Works Feed, 48-Inch Inserted Tooth Saw and all neces-sary belts. In first-class order.
- 1—No. 3 Farquhar Cable Feed Saw Mill with three Head Blocks and 50-Inch Inserted Tooth Saw. As good as new.
- 1-6 H. P. Peerless Englne and Boiler on wheels.

-2nd hand American Combined Lath Mill and Bolter; in first-class condltion; used three or four months.

20 H. P. Gelser detuched Englae and Boiler with No. 1 Lane Saw Mill, 48-Inch inserted tooth saw and all belt,

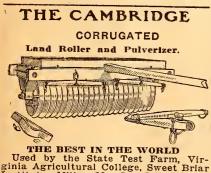
Ac., in first-class order, 1-25 H. P. Talbot Boiler on Sills, 1-25 H. P. Nagle Detached Engine,

both in	good condition.	-
1-7-inch	4-Sided Moider,	
1-4-inch	4-Sided Molder.	
	-ALSO-	

1-48-lnch Saw.	Inserted	Tooth	Simonds
1-54-Inch Saw.	Inscrted	Tooth	Simonds

We invite your correspondence and will gladly give any information de-sired.

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



Used by the State Test Farm, Vir-ginia Agricultural College, Sweet Briar Institute, Miller M. L. School and some of the best farmers in the State. Address:

R F. HARRIS && CO., Chariottesville, Virginia.

THE D'XIE PEA HULLER.



Hulls and cleans 5 to 6 bushels peas per hour. Does not break the peas. Has two Cranks, sieve and seed box. Runs light. well built, never breaks Cot Our Special Outto Get Our Special Quota-tions for Quick Orders. SANDERS MFG., Co., Dalton, Ga.

Please mention the Southern Planter.

therefore make it a point to call at the tent or booth occupied by Parke, Davis & Company, and post up on these products. You will find there a representative of the company whose business it is to give information along these lines. From what we know of Parke, Davis & Company, we can assure our readers that they will be given a very cordial welcome and will be able to carry away information that will amply repay them for the time spenf.

Would it not be a good idea to start now to keep a memorandum of things you want to see and do at the Fair? Put down "See Farke, Davis & Company's exhibit" as the very first item.

HISTORICAL WRITERS OF THE SOUTH.

MARY WASHINGTON.

Amongst the Virginia historians of the last century I may mention J. W. Campbell, who wrote a small but valuable work on Virginia, published in 1813, and Charles Campbell, his son, still better known as a historian.

Henry Howe was also a Virginia historian of very good standing. He wrote about the year 1845 a history of Virginia, in three divisions, as follows:

"The Outline, in which he fol-1st. lows Bancroft quite closely."

2d. "Miscellanies, furnished from various sources, traditional, historical and statistical."

3d. "Antiquities, em racing county formations, alphabetically arranged, and many curious incidents connected with their histories, together with sketches of some of the inhabitants."

"In preparing his subect matter," we are told by the author of 'By-Ways of Virginia History.' "Howe found Charles Campbell, author of the 'Colonial History of Virginia,' better informed on the history of Virginia than any one he had met in the course of his investigations." About that time Campbell was contributing historical "Southern articles to the "Southern Literary Nessenger," which doubtless proved very germane to Howe's purposes. Campbell himself published a history of Virginia in 1860.

Following his work on Virginia, Howe wrote a very entertaining one on "The Great West," with narratives of important events, sketches of frontier life and the remarkable adventures of the pioneers, and descriptions of natural curiosities.

EDWARD A. POLLARD.

1832-1872.

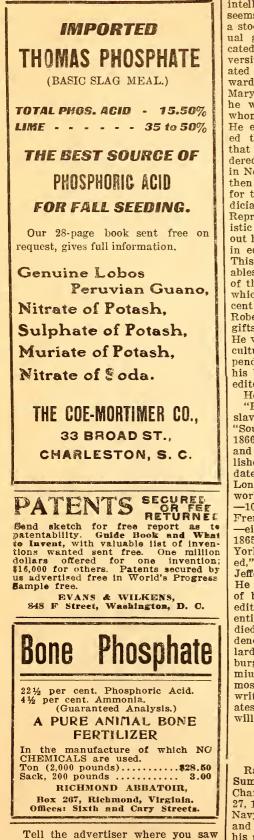
Edward A. Pollard was born in Nel-27, son county, Virginia, February 1832. He was the son of the Hon. Richard Pollard, who was for eight years United States Minister to Chili under the appointment of President Jackson. His mother was a Miss Rives, sister of the distinguished and



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

Article No. 4.

[September,



Tell the advertiser where you saw his advertisement.

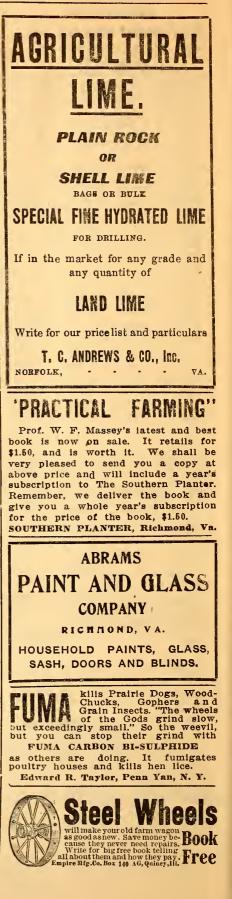
intellectual William C. Rives, so it seems natural that one coming of such a stock should exhibit maked intellectual gifts. Edward Pollard was educated at Hampden-Sidney and the University of Virginia, where he graduated in some branches in 1849. Afterwards he studied law at William and Mary under Judge Tucker, with whom he was a great favorite and from whom he imbibed his political bias. He emigrated to California and shared the adventurous life incident to that wild region in 1855, when he wandered Southward, spending some time in Northern Mexico and Nicaragua, He then went to Washington city, where for two years he was clerk of the Judiciary Committee of the House of Representatives, besides doing journalistic work. When the Civil War broke out he came to Richmond and engaged in editing the "Richmond Examiner." This became, under his auspices, the ablest and most widely known journal of the South during the war, a fact of which Major Stiles speaks in his recent work, "Four Years Under Marse Robert." Pollard possessed all the gifts required for a first-class editor. He was not only intellectual, witty and cultured, but he was fearless, independent and pungent. At one time his brother, Henry Rives Pollard, was editor of the Examiner with him.

He wrote the following works:

"Black Diamond," sketches of negro slavery, with illustrative anecdotes; "Southern History of the War," 1862-1866, two large volumes, retouched and extended; "The Lost Cause," Published in various forms and at various dates in Richmond, New York, and London. This was his most popular work and sold largely for those days -100,000. It was translated into French. "Observations on the North" -eight months on parole, Richmond, 1865; "Lee and His Lieutenants." New York, 1868; "The Lost Cause Regain-ed," New York, 1869; "The Life of Jefferson Davis," Philadelphia, 1870. He was also the author of a number of brochures. From 1867 to 1869 he edited a weekly paper in Richmond, entitled "The Southern Opinion." He died in December, 1872, at the resi-dence of his brother, Mr. Richard Pollard, of Lynchburg, and the Lynch-burg News passed the following encomium on him: "He was one of the most brilliant, eloquent and forcible writers of this age, and his death creates a void in literary circles which it will be difficult to fill."

RAPHAEL SEMMES. 1809-1877.

Raphael Semmes, the hero of the Sumter and Alabama, was born in Charles county, Maryland, September 27, 1809. He entered the United States Navy in 1826, but afterwards resigned and engaged in the practice of law in his native State. In the Mexican War he again entered the service, and when



1908.]

RED CLOVE

FARMOGERM

ADRE SIZE-FRUIT \$ 2.5

his vessel was lost during the siege FARMOGERM (High Bred Nitrogen-**Gathering Bacteria**) GROWSand Keeps It Growing Where It Never Grew Before You know that Alfalfa cannot thrive unless its nitrogen-gather-ing bacteria are present in the soil. You know that all Clovers, Soy Beans, Cow Peasand other regumes Beans, Cow Peasand other legumes need bacteria. So don't plant Al-falfa or any leguminous crop where it has not grown well before, until you get Farmogerm to in-oculate the seed. Beccusse we will prove to you that Farmogerm is the only sure, quick, simple and economical method of inoculation. **Makes Poor Soil Good Soil** because it contains High Bred bacteria, carefully selected, strong, active bacteria, that will produce immediate results on the crop and permanently enrich the soil. Don't class Farmogerm with other bacteria cul-tures. It is different. It is right. You owe it to yourself to investigate. PRICE: \$2.00 an Acre Garden Size 50c Cultures for All Legumes put up In sealed bottles, ready for use. Keeps perfectly. When Ordering Mention For What Crop. Write for Free Book No. 13. It contains the How and Why and the reports of experts and users. EARP-THOMAS FARMOGERM CO. Bloomfield, N. J.

> A Great Discovery DROPSY CURED with vege-table remedies; removes all symptoms of dropsy in 8 to 20 days; 30 to 60 days days; 30 to se days effects permanent cure. Trial treat-ment furnished free to every sufferer; nothing fairer. Fer circulars, testi-monials and free ALC: NUMBER H. H. GREEN'S SONS, Atlanta, Ga.

write Dr.



Time to Paint Let us quote you prices on Paint that will give you satis-faction. Color cards and all information cheer fully furnished. Write to-day. Liebermuth

Bros. Richmond, Va.

WANTED **Bills to Collect** -

In all portions of the United States. No collection, no charge. Agencies Wanted everywhere: 25 years' expe-rience. PALMORE'S COLLECTION AGENCY. 911 Main St., Richmond, Va.

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

of Vera Cruz he joined Gen. Scott's army as a volunteer. His experience then furnished material for his two works, "Service Afloat and Ashore During the Mexican War" (1851), and "The Campaign of Gen. Scott" (1852.) In 1855 he obtained the rank of commander, and was made secretary of the light-house board, but resigned this position and went to New Orleans, where the Southern Confederacy was organized. Taking command of the side-wheel steamer Sumter, he dashed through the blockading squadron at the mouth of the Mississippi, June 30, 1861, and within one month destroyed eleven American merchant vessels. In her subsequent cruise, after taking in coal at Trinidad, the Sumter destroyed six American vessels. She arrived at Gibraltar January 18th, 1862, where, being hotly pressed by United States warships, she was nomi-nally sold and carried to Liverpool, where she was repaired and used as a Confederate transport. Semmes, a few months later, became commander of the famous Alabama, which origi-nally was simply called "290." On her deck he performed exploits fully ri-valling those of Paul Jones, but time fails me for enumerating them, and besides, they are too well known.

Before the war closed Semmes returned to Mobile, and on its capture, he was imprisoned for some months, but was released without trial. He was afterwards an editor at Memphis, then a professor in New Orleans and a lawyer in Mobile. He seemed to have imbibed something of the unstable nature of the waves on which he had spent so large a part of his life. He died near Mobile August 30, 1877.

In 1864 a small volume appeared in London and New York entitled, "The Cruises of the Sumter and Alabama, from private journals and other papers of Commander R. Semmes, C. S. A., and other officers."

But Semmes' own individual work on this subject appeared in 1869, under the title of "Memoirs of Service Afloat During the War Between the States, by Admiral R. Semmes, of the Late Confederate Navy."

This was published in Baltimore, in a royal octave volume of nearly 800 pages. Though its tone was, of course, partisan, yet as a Northern pages. critic said, "Whenever Semmes gets on the blue water he is easy, natural and graphic, and his narrative is kept up with spirit and interest to the close. Were he to put forth his best abilities, we have little doubt he could produce sea fiction that would not discredit Cooper or Marryatt."

In connection with Semmes and his memoirs of the Confederate navy, we may mention the following other works which have been written on that subject:

Sinclaire's "History of the Alabama," Schaff's "History of the Confederate States Navy," Capt. Wilkinson's "Blockade Running."



Make Your Idle Money Earn You Interest

Write the FIRST NATIONAL BANK of Richmond, Virginia, for information concerning its certificates of deposit, so arranged that One Per Cent. may be collected every Four Months through your nearest bank or store. Our experience proves this form for savings to be the most satisfactory plan yet devised for deposits of \$100.00 or more.

or more. Our Capital and Earned Surplus is

\$1,600,000 John B. Purcell, President.

Jno. M. Miller, Jr., Vice-Pres. Cashier. Chas. R. Burnett, Asst. Cashier.

J. C. Joplin, Asst. Cashier.

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 coun-ties of Chesterfield, Amelia, Powhatan, Nottoway, Dinwiddie, Prince George, Surry, Charles City, New Kent and James City. For plan and membership write to write to

CHARLES N. FRIEND, General Agent, Chester, Va. Organized January 9, 1899.

THE VIRGINIA LANDSCAPE

AND MAINTENANCE CO. INC. 416 Watt. Rettew & Clay Building.

ROANOKE, VA.

Entomologists, Foresters, Landscape Architects, Englneers.

KILL SAN JOSE SCALE WITH GOOD'S CAUSTIC POT. SOAP NO. 3 James Good, 959 N. Front Street, Philadelphia.

[September,

THE **VIRGINIA POLYTECHNIC INSTITUTE**

(State Agricultural and Mechanical College, at Blacksburg, Virginia. A Southern Institute of Technology.)

Southern Institute of Technology.) Fifty-six instructors, thoroughly equipped shops, laboratories and in-firmary. Steam heat and electric lights in dormitories. Library of 10,000 vol-umes. Farm of eleven hundred acres. Degree courses in Agriculture, Horti-culture, Applied Chemistry, Applied Geology, Civil, Mining, Mechanical and Electrical Engineering, Metallurgy and Metallography and Preparatory Veter-inary Medicine. School of Agricultural Apprentices.

Apprentices. Total cost of session of nine months, including tuition and other fees, board washing, uniform, medical attendance, etc., \$276.60. Cost of State students, \$226.60.

The next session opens Wednesday, September 23, 1908. For catalogue and other information, apply to

PAUL B. BARRINGER, M. D. LL.D., President.



WARRENTON, VIRGINIA

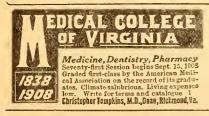
The Law School **Richmond College** Est. 1870.

Session begins Sept. 24

The course, covering two years, is thorough, comprehensive and practiis cal.

ADVANTAGES: Opportunity to at-tend the State Courts, from lowest to highest, and the Federal courts.

FREE ACCESS to the LAW LIBRA-**RV** of the Supreme Court of Appeals, the finest Law Library in the State. Richmond offers unexcelled opportun-ities for culture. For catalogue and Information, address F. W. BOATWRIGHT, President, Richmond, Va.



PIANOS AND ORGANS

After forty years in the Piano and After forty years in the Plano and Organ business, I desire to retire and take a rest. I have a large stock of New and Second Hand Instruments on hand that I desire to dispose of be-low the market price, cash or on time. Do you want a bargain? Address: F. W. WALTER. Staunton, Va.

Always mention The Southern Planter when writing advertisers.

ABSORBINE.

Mr. Frank Bouge, Bement, Ills., writes under date of May 22, 1908: Ills., "What I have used of Absorbine 1 have found a great help. I had a horse that got kicked in the hock joint and a knot came; used several blisters but none of them did any good. I got a can of your Absorbing and used it; the knot went away and I sold the horse for one hundred and fifty dollars. With that blemish on his leg he would not have brought more than seventy-five dollars." Perhaps you have a horse in your barn that would work better and be worth more if he didn't have a bog spavin, wind puff, shoe boil, or some of the blemishes various common to animals. If so use Absorbine and you will be rewarded with a sound animal-a better worker and worth more money. Absorbine does not blister or remove the hair and horse can be used while treating. \$2.00 per bottle at all druggists or delivered upon receipt of price. W. F Young, P. D. F., 109 Monmouth St., Springfield, Mass.

CONDITION OF APPLE CROP AND FORECAST OF PRICE. Crozet, Albemarle Co., Va.,

August 20, 1908.

Careful investigation from the most reliable sources indicate a large crop of apples generally in New York State, full crop in the New England States and Canada. There is a very short crop in the Middle West. But the Pacific Coast is an extra heavy one. Europe reports a large crop. Under existing prospects the outlook is unpromising for export markets. The northern markets will also be well supplied. The most promising markets for Virginia apples should be in the middle west and south of us, especially the latter. We are having inquiries from both these sections, none from north or Europe so far. Our crop promises to be above an average in quality, with 60 per cent. or more in northern Piedmont, much less southward, average for Va. possibly 35 per cent. to 40 per cent. There will be no prices such as last year's obtainable. Rea apples should be worth \$2.00 to \$2.50 at picking time, F. O. B. Under present conditions I don't believe good apples can be raised and sold for less than \$2.00 The demand for Pippins, which are universally short in Virginia, will be regulated by European and northern demand, and should range in my opinion probably 50 cents higher than Red apples.

WALTER WHATELY, Secretary-Treasurer.

Franklin Co., N. C., Feb. 22, 1908. If I could take only one paper it would be the Southern Planter. JAS. C. PACE.





Please mention The Southern Planter.

Northern Virginia Farms

Here Are a Few Bargains

No. 132. Contains 50 acres of smooth gently rolling, fertile land divided into four fields; pure running stream run-ning through the farm. The land is all in a good state of cultivation, choc-olate clay with stiff subsoil. The house cellent well at the porch; stable, corn house, granary, all in good condition. Farm is situated in Loudoun County on a good level road, 2½ miles from the station. Price \$2,000.

No. 190. Consists of 210 acres, 186 acres cleared, 24 acres in timber; all good chocolate clay soll; fine for grass and grain of all kinds; situated in Loudoun County, 24 miles from Wash-ington, three-quarters mile from mac-adam road leading into the city. Land is a little rolling, but would be con-sidered level; fenced into ten fields; water in all the fields and the whole place is under good force; sit miles to water in all the fields and the whole place is under good fence; six miles to railroad station, close to village with post-office, stores, shops, church, school and mill. Orchard consists of about 100 trees of different ages and kinds of fruit. The dwelling is an 8-room, new frame house with a good tenant house; barn 16x24; stall for 6 horses, good granary, corn house, machine house and other small outhouses. Price \$5,000. \$5.000.

No. 191. Consists of 475 acres, 800 acres cleared, the balance in wood land, part of it in original growth oak and hickory. This land is all a heavy grass and grain soil, rolling enough to drain well; chocolate clay soil, fine for wheat and corn and permanent grazing. It has two small never-fall-ing streams through it; fairly well fenced. The buildings are a little out of repair, but comfortable enough to live in. The farm has one 5-room house and one 6-room house, frame filled in with English brick; stable for house and one 6-room house, frame filled in with English brick; stable for six horses, and other small outbuild-ings. This is a property where, if a man is willing to dwell in a modest house, he can purchase at a bargain, make a most elegant and profitable estate; in an excellent section of Fair-for Gounts 20 willow for With the estate; in an excellent section of Fair-fax County, 20 miles from Washington, six miles from Herndon station. The land is in good condition and is mak-ing fine crops. The owner is old and wants to sell, and if it interests you, and you are ready to buy, do no delay. It can be bought on very easy terms. Price, \$8,000.

Price, \$8,000. Farm No. 76. Contains 243 acres, 25 acres in good timber, balance is cleared and weil fenced with wood and wire fences. This farm is one of the finest little farms in Loudoun County. Every field has been limed, and the land is in a high state of cultivation. It is natural bluegrass and clover land. Two-thirds of the land is now well set in olover and will yield enormous crops next year. The farm is situated on an elevated point, on rolling ground, with a fine view of the mountains on one side, and the other side is a beautiful is all smooth, free from stones and stumps, rolling enough to drain well, but would be considered comparatively level. The house is an 8-room house, perhaps 50 year old, but well pre-reserved. Fine water. There are all the borses and cattle barn with stalls for 16 horses and cattle barn with stalls for the theorem is one mile from allroad station. Price, \$37.50 per acre. Bend for my new List.

Send for my new List.

WM. EADS MILLER, HERNDON, VA.

LOW PRICED ROOFS.

Some ready roofings have so little protective quality of their own that they require painting every year, although there are better grades which can be left as long as three years without this protection.

The cheapest way out of the difficulty is to buy a foofing which needs no painting whatever. Such a roofing is Amatite, which our readers will find frequently advertised in these columns.

The mineral surface of this material scorns the protection of paint and faces the weather boldly. Rain, snow and wind have no effect whatever upon it, and it will give good service year after year in the most extreme exposures without any care or attention.

A sample of Amatite can be obtained by requesting same on a postal card addressed to the nearest office of the Barrett Manufacturing Company, New York, Chicago, Philadelphia, Boston, St. Louis, Cleveland, Pittsburg, Cincinnati, Kansas City, Minneapolis, New Orleans.

HOW THE FARMERS CAN SAVE MONEY.

Every farmer is interested in this subject. And it is right he should be. But, as in all walks of life, a good many of them lack initiativeare satisfied to follow in the footsteps of their predecessors. Those who are up-to-date, who are always on the lookout for opportunities to increase their profits, have realized for some time now that the old wooden-wheeled farm wagon is a thing of the past, and that the lowdown steel-wheel wagon is the only kind that will save money and horse flesh

So that every farmer who reads this paper will readily understand how much labor and money can be saved by the use of low-down wagons with wide steel tires, and how little these improvements cost, The Empire Mfg. Company, Box 140, A. I. Quincy, Illinois, have issued a little book, giving some astonishing facts of the greatest value to everyone who uses a wagon or needs a wagon.

This book shows conclusively that the Farmers' Handy Wagon, with low steel wheels and wide tires, is the best wagon built for every kind of heavy teaming, and that it will last a lifetime without repairs.

For the benefit of farmers whose wagons are in good, serviceable condition, with the exception of wooden wheels, this company make and supply a line of steel wheels differing in height, width of tire and size of axle. Thus any wagon whose wheels are worn can be made better than new at very little cost.

The Empire Mfg. Company will gladly send you one of their books. Write to-day. It will be worth your while.

Fine Stock Farms

277 acres, in a good state of culti-vation, just rolling enough; in a good neighborhood, 4 miles from railroad, in Loudoun county; 77 acres in tim-ber; mostly oak, some of it first class; faces on two roads; has been operated a cattle, sheep and hog farm for as a cattle, sheep and hog farm for 25 years. On account of old age the owner is offering his farm for much less than its true value; well fenced. Two houses in first-class condition— one 10-room house, the other 6-room. Price, \$8,000; one-third down, balance to suit. 142 acres, 3 miles from station, stream through place; size

to suit. 142 acres, 3 miles from station, stream through place; nice 8-room house; fine shade; good barn and out-buildings; 8 miles from electric line. A fine poultry place. Only \$4,500. 75 acres 3 miles from rail; 2 acres in timber; 30 acres clover and timo-thy, 13 in oats, 17 in corn; a large stream; springs in all fields; Page woven wire fencing, with cedar and locust posts. First class house of 15 rooms, with large bath room; fruit and rooms, with large bath room; fruit and shade trees; orchard of 4 acres. Good barn, 28 by 50-box stalls; cow barn adjoining; all necessary outbuildings; running water at barn. Water piped to house from spring 85 feet away. A fine place. Make us an offer on this place.

place. 93 acres 1 1-2 mile from station and town; 18 acres in oak timber-rest mostly in grass; heavy clay soil, in a good state of cultivation; 9 room house in good condition, with cellar; well at door; pretty lawn, plenty of shade. First class barn, with basement for 25 head of cattle; all kinds of fruit; nice outbuildings. This is an ideal home, and an excellent investment. Price \$\$,000; \$2,000 down, balance to suit. suit

200 acres near Herndon, railroad and thriving town, on macadam road, 27 miles from Washington; 130 acres un-

thriving town, on macadam road, 27 miles from Washington; 130 acres un-der cultivation, balance in valuable timber, well fenced; attractive, modern 9-room house in splendid condition; fine lawn, plenty of shade; beautiful view; tenant house; large barn, and all necessary outbuildings; property is being bought up rapidly in this sec-tion. Price, \$15,000; \$3,500 down, bal-ance on easy terms. 335 acres 7 miles from rail; 300 acres cleared; 200 acres in good blue grass; good clay soil; well watered by creeks and springs; nice orchard; brick and frame house of 14 rooms-plenty of shade; barn with basement and all other necessary farm build-ings; in a good section of Loudoun, surrounded by a wealthy class of land owners. Has been held at \$12,000, but can now be had for \$9,000, to settle up an estate. One of the best bar-gains in the county.

up an estate. One of the best bar-gains in the county. 254 acres, 3 miles from rail; 54 acres in timber; an excellent sheep and heg farm; 7 room house; barn and out-buildings in good condition; very finely watered by running streams; blue grass, Price \$6,300. One third down—

watered by running streams, but grass. Price \$6,300. One third down-balance to suit. 264 acres, 4 miles from station; 30 acres in timber; blue grass; artesian wells; 3 never failing springs; 7 room house, barn and outbuildings fair; a fine stock farm; paying 12 per cent. on investment; in a high state of cul-tivation. Price \$6,500. 233 acre farm, one and a half miles from good town and railroad station. Not far from Herndon. The buildings are good. It will make a fine stock farm with a little spent on it. It is on a public road, and lies well, in a good authorized us to sell this farm for \$5,575 in order to make a quick sale, as she has been compelled to go Weat, and can not manage it. Terms to suit unverser There is a mortgage of and can not manage it. Terms to suit purchaser. There is a mortgage of \$1,000 at 6 per cent. on the farm, which runs to Nov. 1, 1908. P. B. BUELL & SON, Herndon, Fairfax Co., Va.

BARGAIN.

A HANDSOME AND PRODUCTIVE ESTATE OF 843 ACRES.

Two and half miles from county seat four miles from one railroad and five miles from another. This property is in delightful neighborhood and would make an elegant all the year home.

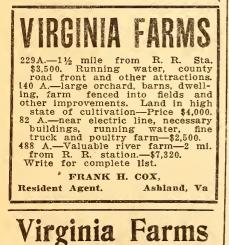
In delightful neighborhood and would make an elegant all the year home. The soil is red and chocolate loam, making fine grass land, and grows excellent crops of tobacco and grain. Of the 843 acres about one-half is in timber, much of which is original growth, and the balance in a fine state of cultivation or grass and pasture, watered throughout by springs and branches. There is about 12 miles of wire fencing with cedar posts, more than half of which is woven wire, forty-nine inches high.

The dwelling is a splendid brick building with thick walls, large rooms with high ceilings, and porches front and back. It is prettily situated in a yard of about two acres surrounded by large forest trees. In addition to the dwelling there are brick servants' quarters; also brick tenant house, chicken houses with wired yard and three barns.

three barns. This property would make an ideal place for raising cattle, hogs and sheep, on account of the short winters and mild climate, and proximity to market.

There are excellent schools, churches and stores at the Court House, two and half miles away. PRICE \$15,-000.00, which is considerably less than its value.

> P. B. BUELL & SON Herndon, Fairfax Co., Va.



Handsome Country Homes and High-Grade Farm Lands a Specialty. J. E. WHITE, "THE LAND MAN," Charlottesville, Va.

Mill for Sale.

Up to date, 36-barrel- water-power, roller mill and saw mill, in good grain section, close to schools, good brick dwelling, garden and spring. Will be sold cheap.

Dixon Bros., Lexington, Va.

AMERICA'S AMAZING AGRICUL-TURAL ADVANCE.

The increase in the value of farm property of \$8,000,000,000 between 1900 and 1907 is nearly nine times as great as the aggregate notional-banking capital of the United States. It is more than one-half as large as the total capitalization, bonds and stocks included,, of all the railroads in the United States. It is nearly three times as large as the aggregate savings-bank deposits of the whole country. Think for a moment of the increase, simply seven years' increment, in the value of farm property being nine times as great as the total national banking capital of the United States, three times as great as all the savings bank deposits accumulated during all the past, and half as large as the entire capitalization of all the railroads in the United States, into which the surplus money of the land has been pouring for over three-quarters of a century.

In all the records of American development nothing is more remarkable than the advance made during the last few years by the agricultural interests of this country. The story of what the farmers are doing and of what they have accomplished within the last few years is unmatched even by the marvelous growth in manufacturing. In 1890 the 8,565,000 people engaged in agriculture in this country produced a total of \$2,466,000,000, or an average of \$287 per capita. In 1907 the 11,991,000 engaged in agriculture produced a total of \$7,412,000,00, or an average of \$618 per capita. During that period the number of people engaged in agriculture increased by 40 per cent., while the value of farm products increased by 200° per cent. and the value of all farm property increased by 89 per cent.

In the brief period between 1900 and 1907 the value of farm property advanced in value from \$20,439,000,000 to \$28,077,000,000,a gain of nearly \$8,-000,000,000, or 37 per cent, though the number of people engaged in agricultural pursuits increased only 15 per cent.

A study of facts bearing upon agricultural conditions since 1870 shows that in that year the value of all agricultural products per capita to those engaged in farm pursuits was \$326, while from that figure there was a rapid decline to \$286 in 1880, and during the next ten years the per capita was practically stationary, as the average in 1890 was only \$287. If reliable figures were available, they would show a marked decline between 1890 and 1896, because it was during that period that the agricultural interests reached their most acute stage of poverty. In those years farm products, not only in the South, but throughout the country, were greatly depressed, selling in many cases below the cost of raising. Farm lands like-

To Settle an Estate. \$7,000.

200 acre farm, of chocolate clay soil, land gently rolling; 20 acres in woodland, balance in grass and under cultivation. Situated on Washington City metal road, in Loudoun county, 24 miles from city, 5 miles from trolley, 2½ miles from railway station; running water in every field. Bank barn 40x60; 10 room farm house, in fair condition; outbuildings; apple orchard; convenient to churches, schools and all commercial industries one could desire. For further particulars address:

Box 21, Sterling, Va.

\$12,500.

400 acre farm, chocolate clay soil; situated in Loudoun county, 29 miles from Washington city, ½ mile from railway station; 60 acres of the best and heaviest oak timber in the State; balance in grass and under cultivation; large barn, house and outbuildings in fair condition; running water in every field. Has been used, until recent years, as dairy farm and is a good one. Heirs out of State. For further particulars, address:

Box 21, Sterling, Va.



Cheap-A Fine Stock Farm

Cheap-A Fine Stock Farm **\$10,500.00** 315 acres with crops, stock, and all necessary farm implements. Near Leesburg, in a good neigh-borhood, near schools, churches, stores, etc. not far from the river 75 acres in fine timber; good blue grass soil, in a good state of cul-tivation; yields I barrel of corn to shock; half of farm level, balance rolling, but not hilly, with the ex-ception of 1 field; good fencing; farm divided into five fields, with spring in each; wind-mill sup-piles water for house and barn; close to public road; R. F. D. every day.

Lorge to public road; R. F. D. every day. Large brick house in fine condi-tion, beautifully located on a high hill, with lawn and fine shade trees; hen-house, meat-house, etc., in good condition. Fine young orchard in bearing. 65 acres in corn; 30 acres in wheat and rye; 65 acres in clover an dtimothy; balance in grass. 5 horses, 4 of them fine brood mares; 4 young cows; 3 young steers; 10 hogs; 1 sow. All kinds of farm machinery in good repair. The owner is old, and wants to go to the city, and will sacrifice this farm, if sold within sixty days.

days.

beautiful home and fine farm. Write, or come on at once.

B. P BUELL & SON, Herndon, Va. Stock farms and country homes in Northern Virginia a specialty.

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THE SOULE CO., Washington, D. C. Large^st Farm Dealers in the South.

FOR RENT.

180 ACRE FARM

21/4 miles from Salisbury, North Car-24 miles from Salisbury, North Car-olina. Good road, good water, health-ful location. Eighty acres in cultiva-tion, good soil, 30 acres fine meadow, ditched and well drained. I acre strawberries, 3-year-old orchard. Two sets of buildings. Fine location for dairying and trucking. Will give 5 year lease to responsible party recom-mended mended. D. W. BURRIGHT, Salisbury, N. C.

Old Virginia Farms. Climate and Productiveness unexcolled. Largest sale list in State. For full particulars and Free Cata-legue address

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"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 reasona

MACON & CO., ORANGE, VA.

wise steadily depreciated in value. By 1900, however, there had come a great change, due to the advance between 1897 and 1900, and in the latter year the value of farm products per capita was \$451, a gain of \$164 per capita, or about 57 per cent., compared with 1890. Since 1900 this gain has continued uninterruptedly, rising in 1905 to \$558 per capita, in 1906 to \$579 and in 1907 to \$618. Secretary of Agriculture Wilson estimates the total value of this year's farm products at \$8,000,-000,000, or a gain of about \$600,000,-000 over 1907. Accepting Mr. Wilson's figures as correct, though we believe that they will prove to be too small, the per capita production will show another rapid advance this year.

The effect of this really amazing change in agricultural conditions finds an illustration in the advance in the average value of farm property to the number of people engaged in agriculture. In 1880 the average per capita was \$1579. By 1900 this had increased to \$1958, or in twenty years an advance of \$379 per capita to those engaged in agricultural pursuits. Between 1900 and 1907 this increase continued at such a rapid rate as to bring the average up to \$2341 in 1907, or a gain in seven years of \$383 per capita, which was a larger increase for that period than the gain in the 20 years from 1880 to 1900. The actual gain in the value of farm property since 1880 has been equal to an average of \$762 for every man, woman and child engaged in agricultural pursuits.

These figures is a gain, an increment added to the wealth of our farmers, so amazing in its magnitude as to be difficult of comprehension. No wonder the mass of farmers South and West are largely out of debt; no wonder much of the idle capital in the country banks in all sections is the surplus money of farmers. This remarkable advance in the average value of production per capita and the increase in farm values has a number of reasons for its existence.

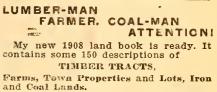
In 1890 to 1906 the increasing poverty of the farmers of all sections, due to low prices, was the subject of al-most universal discussion. Consumers of farm products were then buying at a lower cost than they had ever known before. But the producers, the farmers of the land, were in dire poverty. With the increase in manufacturing during the last ten years, and with the development of railroads and the large increase in the number of their employees, making a great gain in the number of consumers of farm products, and the gradual elimination of the cheap lands of the West by settlement, and the flood of gold pouring into the world's channels of trade, we have had a combination of circumstances which have united to bring about a much higher range of values. The consumer of farm products is no longer rejoicing in the low prices which prevailed twelve or fifteen years

ATTENTION

HOMESEEKERS AND INVESTORS.

I sell and exchange Virginia Real Estate of all classes, such as Grain, Dairy, Fruit, Stock, Truck, Poultry and Bluegrass Farms, Village Homes and Susiness Places of all classes. The reason I make a specialty of the two suburban counties—Loudoun and Fair-lax—they offer the homeseekers more advantages combined then any country lax-they offer the homeseekers more advantages combined than any country known to me. This fine portion of Virginia, extending from the national capital to the top of the Blue Ridge Mountains, is not only beautiful and healthy, but is very accesible to Wash-ington and Alexandria cities by rail and pike, which gives all producers a dne home market. My facilities for locating you in this section of Virginia are second to none. date what kind of property would in-terest you. I have a large number and great variety of properties, and can early likely suit you. New catalogue and map mailed free on request.

W. H. TAYLOR, Herndon, Va.



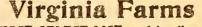
I also have a nice Cement property, and some splendid Hotels to offer. Write at once for it. It is free for

the asking. J. W. GUINN, General Manager,

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100 ACRES ONLY \$1,200.

300 baskets of peaches were gathered last season; the soil is adapted to grow-ing all kinds of fruit; 70 acres cleared, balance in wood and timber; 1 mile to village, ½ mile to school, mail de-livered; cottage house, stable and out-buildings; only \$1,200-\$600 will be left on easy terms; for full details of this and other Delaware bargains this and other Delaware bargains write for List No. 21, a large illus-trated catalogue just issued. E. A. Strout Company, Land Title Bldg. Philadelphia.



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= 130 ACRE FARM =

For Sale 8 miles from Richmond, 1 mile from depot on steam and electric railroad. Good dairy and truck farm, about 70 acres cleared, rest in timber. Cannery on next farm. For particulars address,

R. E. BUTLER, Drewry's Blnff, Va.

Please mention The Southern Planter.

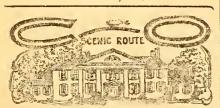
125 acres 1 mile from station; only 10 miles from Washington on pike; near electric line; 75 acres cleared; good soil; well fenced; good house of 11 rooms with modern improvements, cost \$5,000 4 years ago; ample shade. Frame barn with brick basement, 24 by 40 feet. All other necessary out-buildings. A very fine orchard. Cheap at \$15,000. \$15,000.

21 acres one and a half miles from station; stream through place; fine 11-room house; plenty of shade; nice iawn; fine fruit; barn and outbuildings; only nine and a half miles from Wash-ington. Price \$3,750.

Stock farms in Northern Virginia a specialty.

Write or telephone us what you want.

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\$5. PER ACRE AND UP. VIRGINIA FARMS

Full improvements, productive soil, abundant water, excellent climate-along the Chesapeake and Ohio Rall-way. Write to-day for handsome illus-trated booklet and homeseekers' rates. Free sites for new industries. Address G. B. WALL, Real Estate Agt., Dept. B., C. & O. Ry. Co., Richmond, Va.

POULTRY FARM

for sale. I intend to devote all my time to other business and offer my farm of 87 acres in Hanover Co., Va., for sale. Write me for particulars and price. Will give a quick buyer a bargain.

CAL HUSSELMAN, Highland Springs, Va.

FARMS. Mineral and Timber Lands. Free list on application. W. A. PARSONS & CO., Richmond, Va. 1527 East Main St., Davis Hotel Bldg.

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THE SOUTHERN PLANTER, Richmond, Va.

ago. The farmer is now having his innings, and though this condition works a hardship upon many consumers, it is a great blessing to the country at large. It should be a matter of general rejoicing that thefarmers are on rising ground financially.

Economic conditions practically assure a continuation of increasing values of farm lands, and an increasing demand for farm products, growing more rapidly than the production is likely to grow, and thus a continued high range of prices for practically all the products of American farms. The consumer can no longer hope to ge⁴ his cotton goods, his bread and his meat at the low price of 1896. We have been passing through an economic revolution, or evolution, to a higher range of living. This necessarily means a higher range of prices for farm products and a higher range of wages for mechanics.

With the agricultural conditions of the country in such a fundamentally sound position as indicated by the figures which we have given, there cannot be any such long period of industrial depression as we had in former years when the farmers were the poorest people in the land. With the certainty of crop yields, which in the aggregate will give us the greatest amount of railroad tonnage and the greatest value to farm products which we have ever had, nature has laid the foundation for a great expansion of industry.

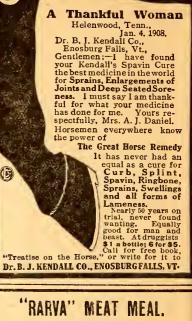
Taking the value of farm products as shown by the following figures, we have a striking illustration of the wonderful growth now under way:

VALUE OF FARM PRODUCTS.

Year	s.		
1870		• • • • •	\$ 1,958,000,000
1880			 2,212,000,000
1890			2,466,000,000
1900			 4,717,000,000
1905			 6,415,000,000
1906			 6,794,000,000
190'7			 7,412,000,000
1908			 8,000,000,000

In the 20-year period between 1870 and 1890 the gain was only \$500,000,-000; in the 30-year period between 1870 and 1900 the gain was only \$2,800,-000,000; whereas in the 8-year period from 1900 to 1908 the gain was \$3,300,-000,000, or \$500,000,000 more than for the 30 years from 1870 to 1900. Beginning with 1900 every year has shown a steady and rapid increase. And in nearly every year the gain over the preceding year exceeded the total gain of 20 years between 1870 and 1900.

Probably nothing more forcibly illustrates this marvelloup change than the fact that the value of the agricultural products of the South alone, which will this year be between \$2,-250,000,000 and \$2,500,000,000, will be more than the total for the United States in 1880 and about the same as



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September.

for the entire country as late as 1890. In 1890 who could have dared to predict that the value of the South's farm products of 1908 would equal the total for the United States in 1890? That the South, with 26,000,000 population, is producing as much value in agricultural outturn as the United States with 62,000,000 people did in 1890 is one of the amazing facts of our history. In 1890 the value of all agricultural products outside of the South was \$1,696,000,000, or at least \$600,-000,000 less than what the South alone will this year produce.

Turning to the figures which tell the value of farm property in the United States we have the following:

Years	s. * ~	hd u	<i>4</i> .	о н	- V	alue.
1870				\$	8,900	,000,000
1880					12,180	,000,000
1890					16,082	,000,000
1900'						,000,000
1905						,000,000
1906						,000,000
1907		• • • •			28,077	,000,000

NUMBER OF PEOPLE ENGAGED IN AGRICULTURE.

Years.

1870		5,992,000
1890		7,713,000
1890	• • • • • • • • • • • • • • • • • • • •	8,565,000
1900	••••••••••	
1905	••••••	
1906	••••••	
1907	•••••	11,991,000

And in this connection the statistics which show the value of agricultural products per capita of the entire population, and the per capita of all engaged in agriculture and the value of farm property to the number of people engaged in agriculture, will be of interest:

VALUE OF AGRICULTURAL PRO-DUCTS.

1870	 \$50.00
1880	 44.00
	 61.00
1907	 85.00

VALUE OF AGRICULTURAL PRO-DUCTS.

Per capita of all engaged in agriculture:

Years.

1870	 \$326.00
1880	
1907	 618.00



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For improving the condition of HORSES, MULES, CATTLE, POULTRY, HOGS, DOGS. Giving them an Appetite and Relieving them of Bots, Worms, Hide-Bound, Surfelt, Distemper, and all Diseases to which Stock is Subject Internally. A Sure Cure

For Chicken and Hog Cholera, Scratches in Dogs.

We guarantee a cure in all di-seases mentioned above or money

Large Bot. 50c. Small Bot, 25c. If your merchant can't supply you send us 30c. for small, or 60c. for large size, and we will for-ward by mail.

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Fleming's Lump Jaw Cure and it remains today the standard treat-ment, with years of success back of it, knewn to be a cure and guaranteed to cures. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried-your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of sell-ing, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket VeterInary Adviser Nuct complete yeterinary book ever printed

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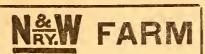


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1010	 • •	•••	- JO. UG
1880	 		44.00
1890	 		39.00



White Plymouth Rocks

Best stock FISCHEL strain Eggs \$1.00 per setting; No birds for sale. A few HAMPSHIRE PIGS also The black hog with white belt. Prices reasonable, S. M. GEYER, Manager, Norfo k & Western Ry, Farm, Ivor, Va.

"RINGLET" BARRED PLYMOUTH ROCKS EXCLUSIVELY.

NORFOLK WESTER

E. B. Thompson's celebrated strain. My birds won at Richmond Show, 1908, 1st and 3rd Cock; 1st and 3rd hen; 1st Prize Pen and Association's Special for Best Display in Barred Rocks. They can not be excelled in egg production. size, vigor and beauty. Beautiful lot of young stock growing. Satisfaction guaranteed. LESLIE H. McCUE, Box 4, Afton, Va.

500 PULLETS.

for sale; Barred, White and Buff Rocks from 6 pens of A. C. Hawkins Royal Strain; some nice cockerels also at reasonable prices. Fine S. C. White Leghorn pullets and

cockerels. Write your wants; we answer cheerfully.

Sysonby Gardens Poultry Farm, Inc. Sam. McEwen, Mgr. Petersburg, Va.



coming to maturity. nicely marked. Correspondence cheerfully an-swered. Circulars free. 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. Have been breeding Black Minorcas seven years, always with the best type in view. Stock and Eggs in season at very moderate prices, con-sidering the quality. Write me for prices and full particulars.

MISS LOUISE V. SPENCER, Blackstone, Va. Headquarters for Pure-Bred R. C. Rhode Island Reds Eggs for Hatching. Stock.

Member R. I. Red Club.

VALUE OF FARM PROPERTY

To number of people engaged in agriculture:

Years

1870		\$1,485
1880		1.579
1890		1,878
$1900 \\ 1905$	••••••	
1905	·····	2,310 2,315
	·····	2,315

Much, however, as the farmers of this country have accomplished in the marvelous advance shown by these figures, they are only at the beginning of their progress. Within the last five or ten years there has been a rapid growth in scientific farming. Under these conditions there is an increasing average yield per acre. We are preparing for an increased yield much greater than the increase in acreage. At the same time millions of hitherto waste lands are being made available for the most profitable of agricultural pursuits. Irrigation in the semi-arid regions of the West is turning a desert into fruitful orchards and vineyards, yielding immensely profitable crops. What irrigation is doing for dry land reclamation is beginning to do on a still more profitable scale for wet land. The country has learned that it is a simpler proposition to take the surplus water off overflowed lands than it is to bring a supply of water to the dry land of the West. Thousands of acres reclaimed within the last few years, yielding to-day great profits where nothing was produced a few years ago, have shown the almost illimitable possibilities in saving to man's uses the millions of acres of reclaimable wet lands which have heretofore been without value. It is estimated that the aggregate wet or overflowed lands which can be reclaimed and the dry land which can be irrigated is greater in extent and will be greater in value per acre when reclaimed than the acreage now devoted to wheat and cotton. This is, indeed, a veritable empire of boundless potentialities which will add immeasurably to the wealth of the South, where reclamation progress is already under way. Considering the progress in scientific agriculture, the steady increase in the yield per acre now going on, the vast expansion in trucking and fruit-growing for the needs of an everexpanding population, the great possibilities in irrigation and reclamation work, we can readily see that the agricultural interests of the country are only at the beginning of their real broad development, and that the future holds in store a prosperity much greater even than the magnificent advance since 1900 has brought them. These facts furnish a foundation for unbound optimism as to the magnitude of ou material progress in the future. -Manufacturers' Record.

Poplar Hill Poultry Farm



S. L. WYANDOTTES A choice lot of youngsters now ready for shipment. Cockerels,

shipment. Cockerels, \$1.25 to \$1.50 each. Pul-lets, \$1. and \$1.25. Mine are not only high scoring birds, but egg producers. Satis-faction to every cus-tomer tomer.

DR. H. H. LEE. R. F. D. No. 4 Lexington, Va

BUFF ORPINGTONS

60 S. Buff Orpington 60 S. C. Buff Orpington yearling hens, 1908 breeders (all good) \$1.50 C. each.

5 S. C. Buff Orpington Cocks \$2 to \$5. One of these is a show bird. All good.

A lot of 1908 hatch Buff Pullets and Cockerels at \$1.00 each. A few choice White Orpington cock-erels at \$1.00 each. 1908 hatched.

FAY CRUDUP, Route 2, Clarksville, Va.

Glenview Orpingtons.

S. C. BUFFS EXCLUSIVELY.

My breeding pens this year include all my Richmond winners. Eggs will e shipped from nothing but the best. \$2.50 per sitting of 15.

B. S. HORNE, KESWICK, VA.

TAYLOR'S

WHITEWYANDOTTES

White Holland Turkeys and White Muscovy Ducks.

Win where shown. Pullets now for sale at \$1 each.

R. RANDOLPH TAYLOR, Hickory Bottom Farm, Negrofoot. Va. R. F. D. 2., Beaver Dam, Va.

WHITE WYANDOTTES.

Cockerels and pullets bred from my best trap nested layers, March hatched, well-grown birds—none better for new blood. A few cocks and hens, \$2 each. R O. BERGER,

(City Address) 16 N. 20th St., Rich-mond, Va.

Bargains in **Black Langshans**

All of this season's breeding stock of the noted egg-laying strain, Black's Black Langshans, are now for sale at bargain prices. Also some choice young birds.

A. M. BLACK, - - - Tazewell, Va.

White Plymouth Rocks!!

At Herndon Show—"Clean Sweep." Have mated first Cockerel with first Hen, first pen and second Pullet from this show. Can spare few eggs from this pen—\$2 for 15—guaranteeing fer-tility. My stock is excellent.

C. M. WALKER, HERNDON, VA. Secretary of Herndon Poultry Association.

PIT BULL PUPPIES.

7 Bull Dog Puppies, 6 males and 1 female. Pedigree with each. \$10 to \$15 each. Fine stock. Large. Parents weigh 60 and 70 pounds each. FAY CRUDUP, Route 2, Clarksville, Va.

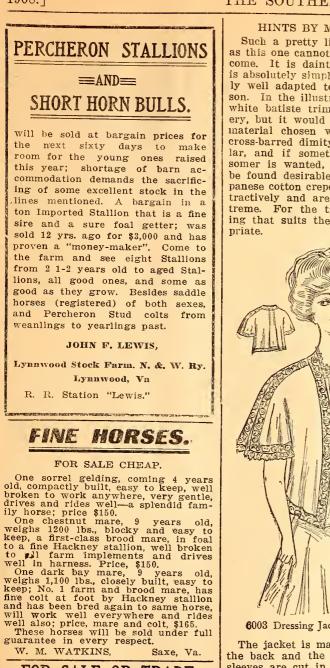
Please mention the Southern Planter.

814

VALLEY FARM BARRED P. ROCKS S. C. B. LEGHORNS

The finest lot of young chicks I ever raised, fast

1908.]



FOR SALE OR TRADE

One thoroughbred Stallion 8 years old and sound; 1 14 1-2 hand pony, 4 years old, plenty of action—would do for a polo pony; 1 Shetland stallion 41 in. high, gentle everywhere, a perfect children's pet. 2 Shetland foals, colt and filly. I want a small bunch of good South-

down sheep and a gaited saddle horse, colt or filly.

PERCIVAL HICKS, North Mathews Co., Va.

FOR MORGAN COLTS

and Fillies and High-Bred Fox Hound Puppies. Address,

Dr. JOHN D. MASSENGILL, Blountville, Tenn.

Please mention the Southern Planter.

THE SOUTHERN PLANTER

HINTS BY MAY MANTON. Such a pretty little dressing jacket as this one cannot fail to find its welcome. It is dainty and attractive, it is absolutely simple and it is peculiarly well adapted to the incoming season. In the illustration it is made of white batiste trimmed with embroidery, but it would be charming if the material chosen were flowered lawn, cross-barred dimity, or anythi: simi-lar, and if something a little handsomer is wanted, Japanese silks will be found desirable. Also the real Japanese cotton crepes make up most attractively and are durable in the extreme. For the trimming any banding that suits the material is appro-



6003 Dressing Jacket, 32 to 42 bust.

The jacket is made with the fronts. the back and the centre-front. The sleeves are cut in one with the front and back portions, and are joined over the shoulders. The centre-front is tucked and the back is laid in a long The closing is plait at the centre. made invisibly at the left of the front.

The quantity of material required for the medium size is 3 3-4 yards 21 or 24, 2 1-4 yards 32, or 1 1-2 yards 44 inches wide with 7 1-2 yards of

banding, 3 1-8 yards of edging. The Pattern 6003 is cut in sizes for a 32, 34, 36, 38, 40 and 42 inch bust measure, and will be mailed to any address by the Fashion Department of this paper on receipt of ten cents.

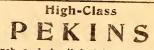
BOYS' RUSSIAN BLOUSE 6058.

No garment that the small boy wears suits him more perfectly than this one made in Russian style. It is absolute-

White Poultry Yards.

J F. Dunstan, Prop. Lorraine, Va.

We are now booking orders for White Wyandoties, W. H. Turkeys, White Guineas, White China Geese, Mammoth Pekin and Wild Mallard Ducks. All bred from our prize-win-



March and April hatched (early egg producers) and yearlings for sale. S. C. White Leghorn Cockereis

March hatched, from eggs from Fogg's Yards, Kentucky. WM. BUGBEE, Palmyra, Va.

REDUCTION SALE OF BERKSHIRE PIGS

One extra fine 16 months old regis-tered boar. I will sell you a bargain in March and April pigs not only ped-igree, but quality and individuality combined. If interested, write me have pleased others, can please you. E. F. SOMMERS,

Somerset, Va.

RARE OPPORTUNITY.

To secure pure-pred Stock. Catenter White, Poland-China and Berkshire Vigs; Jersey Bulls and Helfers; Lin-cola, Hampshire and Shropshire Down Sheep; Scotch Collic Dogs. Variety of poultry. Send 2-cent stamp for cirsecure pure-bred stock.

EDWARD WALTER, West Chester, Pa.

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 Holiand Turkeys and Guineas. H. T. HARRISON, Prop. Leesburg, Va.



For profit and pleasure, buy the O. I. C. Most meat with least feed. D. Wm. Good, Fariand, Roanoke Co., Va.

SHETLAND PONIES

My herd contains many choice, Im-ported, registered individuals, descend-ants of noted prize winners. Write your wants.

MONTROSE SHETLAND PONY FARM, Cartersville, Va.

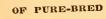


Imported and Kentucky Mammoth Jacks, saddle stallions and mares and Tamworth hogs. We are making special prices through the summer season.

J. F. COOK & CO., Lexington, Ky.

September,









In order to reduce my large and famous herd of Berkshires, I will offer at public sale, on my farm, Wed-nesday, September 30th, 1908, com-mencing at 1 P. M., fifty head of the best and most fashionably bred hogs offered in Virginia. This offering will consist of sows about ready to farrow, young gilts ready to breed for spring litters, young boars ready for immedi-ate service, and a number of boars and gilts from four to six months old. All of the above mentioned stock is out of my famous Silver Tips and Storm King Sows, and are sired by and bred to either my great Hunter of Biltmore III., or Earhart's Model Premier, by the grand champion Pre-mier Longfellow.

mier Longfellow. I extend a learty invitation to all lovers of good hogs to attend the sale, and call attention to the fact that not a single inferior animal will be of-fered. I hope to have the pleasure of meeting a large number of Berkshire breeders on this occasion. Conveyances meet all trains. In-ouviries promuty answered

quiries promptly answered.

D. E EARHART, Nokesville, Va. Main Line Southern R. R.

SUNNYSIDE BERKSHIRES.

Boars in service. "Premier Duke," son of Premier Longfellow; "Peeriess Premier," sired by Lord Premier III., and imported "Hightide Commons." Also a number of sows rich in Premier blood. Prices reasonable. W. R. Walker, UNION, S. C.

BERKSHIRE

Entitled to Registration. MAMMOTH BRONZE TURKEYS, ENGLISH SETTER PUPS, (Blue Belton) My offerings are strictly first class. MRS. G. M. WEST, Vinita, Va.

STERLING HERD **REG. DUROC-JERSEYS**. AND TAMWORTH SWINE Duroc Boars ready for service.

R. W. WATSON, Petersburg, Va.

CHESTER WHITES Best hogs on earth. Pigs now ready for fall delivery. Stock A No. 1 Satisfaction Guaranteed. S. M. WISECARVER, Rustburg, Va.

ly simple, and it has just that touch of masculinity which renders it dear to his own heart while it remains childish in effect. This one is made of striped linen, but the design is adapted to all the materials that are used for boys' blouses, percale, madras and the lik and also the washable flannels that are so desirable for the cooler days.



6058 Boy's Russian Blouse,) 6 to 12 years.

The blouse is made with fronts and back. It is closed well to the shoulder at the left side and buttoned into place and is drawn up by means of elastic inserted in a hem at the lower edge. The sleeves are tucked to form cuffs and there is the always convenient patch pocket on the left of the front.

The quantit of material required for the medium size (10 years) is 3 3-8 yards 24, 2 1-4 yards 32 or 2 yards 44 inches wide.

The pattern 6058 is cut in sizes for boys of 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.

SAW THE SIGHTS OF THE TOWN.

Resident: "Have you seen the sights of the town?"

Stranger: "Yes. All morning I sat in the hotel front window watching them walk by."August Lippincott's.

FAIRFAX FARM SOLD.

Mr. George W. Halstead has sold, through P. B. Buell & Son, Herndon, Va., his 496-acre farm near Centreville, to Mr. T. W. Grimes, of Lou-doun county. This is considered one of the most desirable stock farms in Fairfax county.



PURE BRED SH SHROPSHIRES. SOUTHDOWNS, DORSETS. HAMPSHIRES.

I have Choice Ram and Ewe Lambs, Yearing, Two, Three and Four-year-old Rams of all the Breeds named above and all are registered or eligible to registry.

It pays to buy Good Rams to head your herds of Sheep and now is the time to order. Have sold a number of Rams already and the early buyer gets advantage of best selection and lowest prices.

PURE BRED

CHICKENS-DUCKS-TURKEYS

I have some bargains in White and Barred Plymouth Rocks, regular \$2.00 birds during July \$1.50 each or \$15.00 per dozen. White Leghorns, regular \$1.50 birds at \$1 each during July. Also many other breeds and some good Yearling Pekin Ducks at \$1.25 each if unsold when order is received. Prices on application.

PURE BRED HOGS

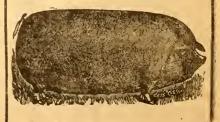
I have some choice 2, 3, and 4 months Pigs of the following breeds. Poland-Chinas, Berkshires, York-shires, Chester Whites, and Tamworths.

Service Boars, and Bred Sows of all the Breeds named above.

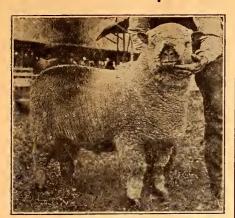
Let me have at least a trial order and I feel sure other orders will follow. Write to-day and address ,

JAMES M. HOBBS,

1521 Mt. Royal Ave. Baltimore, Md.



Pinehurst Shropshires



WARDWELLS "LEAD THE WAY."

YEARLING HOME-BRED RAM. In 1907 we won CHAMPION RAM at Chicago International, Michigan State and New York State Fairs, and every FIRST PRIZE at Vermont State Fair. We have the best Aged. Yearling and Ram Lambs, the best Aged Ewes, Year-ling Ewes and Ewe Lambs for sale— and at reasonable prices—we ever of fered. either for breeding nutroses or fered, either for breeding purposes, or, if you want to buy a Show Flock for the coming Fair Season, we believe we can sell you Sheep that will win at State or County Fairs.

We have about 60 Rams and 60 Ewes

for Sale, fit to go in any flock—besides 100 Lambs for sale. HENRY L. WARDWELL, Springfield Center, N. Y.

Dorset Sheep For Sale

I have to offer this season a large number of Dorset rams of the ages of lambs, yearlings and two-year-olds. My sheep are of the best type and quality having been selected from the best flocks in America. Prices reasonable.

SAMUEL T. HENINGER, Burkes Garden, Va.

Two Pure-Bred

Dorset Ram Lambs

for sale. Older weighed 132 lbs. at shearing; price \$15 and \$20, according to size. Also a few pure-bred large Imported English Yorkshire Boar Pigs. C. E. JONES, Carysbrook, Va.

WOODLAND FARM.

DORSETS.

Sold entirely out at present on both rams and pure-bred ewes. Will have some more good ones later. We have a few ¾ blood yearling ewes that we can spare.

J. E. WING & BROS., Mechanicsburg, O.



Our fall lambs are now ready for you. Let ns hear from you promptly this year.

J. D. ARBUCKLE & SONS, Maxwelton, Greenbrier Con West Virginia. Conuty,

GOOD HOUSEKEEPING. Stewed Sweetbreads.

Frequently the sweetbreads are not used because of the ignorance of their value on the part of the butcher. Those from a young animal are tender, and fully as delightful as the brains, and they are easily cooked. To stew them, wash and remove all the skin and fat. Put into a pan with cold water enough to cover; let come to a boil; throw them at once into cold water; this makes them firm; then chop them and stew in a very little water until tender; pour off the water; add butter, pepper, salt and a cup of new milk or cream and a bit of chopped parsley; stew a few minutes. Serve hot. It is very nice to line the dish with toast and pour the mixture over.

Roasted Sweetbreads.

Let them boil for ten minutes; then throw them into cold water and let them stay until cold; wipe them dry and lay them on a pan and roast slowly, basting with butter and half cup of water until they are brown; take them off; roll in a beaten egg and then in cracker crumbs, and return to the stove; baste with butter; cook ten minutes; put them into another pan and add to the gravy half cup of hot water, chopped parsley, pepper, salt and spoon of brown flour with a tea spoon of lemon juice; boil up and pour over the sweetbreads; serve at once.

Ham and Chicken Sandwiches.

Take equal parts of cold chicken and ham; put them through the meat chopper together so that they will be well mixed; put the mixture into a pan with a small quantity of water or gravy to make a paste; add a lump of butter, pepper and salt and a few celery seed; stir till it heats and when it ha cooked five minutes spread on a dish to cool. Prepare some thin slices of bread and butter; sprinkle grated cheese on some of the slices, a very thin layer of mustard on others; spread the chicken between the slices. These are fine for a picnic.

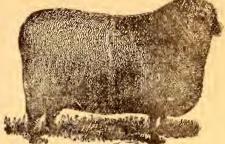
Cheap Sponge Cake.

12 eggs, beaten separately, verv light; 8 cups of flour, sifted 5 times; 6 cups of sugar, beaten into the yolks; 2 cups cold water, 2 teaspoons soda; 4 teaspoons cream tartar. Bake in sheets.

Apple Preserves.

Peel or core the apples or cut them into quarters; to a bucket of water add three tablespoons of lime water; cover the apples with this and let them stand half an hour; drain off all this water and throw them into a syrup made with three-fourths pound of sugar and one cup of water to each pound of fruit and a few pieces of ginger. It must boil slowly until they begin to look clear; then take them out and let them cool while the syrup boils on; return them to the syrup and boil





REGISTERED SHROPSHIRES.

I now offer for prompt acceptance: 1 3-year old Imported Ram, weight when in flesh 180 lbs., thin now owing to drought, weight 150 lbs. Price, \$25.

Three good yearlings, weight about 140 to 160 lbs., at \$18.

6 ewe lambs, weight 90 to 100 lbs., \$12 to \$15.

Ten good ewes, 1 to 5 years old, at \$15 to \$20.

All of above stock is registered, or will be, for purchaser; prices f. o. b. here. Satisfaction guaranteed or money refunded. Send check and be sure of getting good stock.

References: W. B. Copper, Cashier Bank of Chestertown, Md.

H. R. GRAHAM, Chestertown, Md. P. S. If accepted before Sept. 15th, deduct 5 per cent. I have two good Berkshire Boars weighing about 125 and 150 lbs, \$15 each.

Glenara Stock Farm' Summer and Fall Offering

Dual purpose, Short Horn Bull Calves and Yearlings. Dorset Ram Lambs fit for limited service this Lambs fit for limited service this fall), Poland-China Boars, gilts and Pigs; prolific stock, fashionably bred.

Registration papers furnished to all customers. Dams and sires of all breeding offered imported to Virginia from England, Canada, or Western United States. Farmers' prices. Address.

> JOHN BUTLER SWANN, Marshall, Va.

GROVE FARM

Brooklandville, Maryland, P. O. Lutherville, R. F. D.; Telepho and telegraph, 42-K, Town. The property of James McK. and I. B. Merryman. Telephone

GUERNSEYS

The kind that win. Not beaten in 1907. Shown Maryland State Fair, Allentown, Pa., Mt. Holly, N. J., Tren-tom, N. J., Richmond, Va., and Hagers-town, Md. When you buy get the best. A few pure-bred Heifers and Bull Calf dropped April 16, 1907, out of Imp. Lady Simon, by Milford Lassie II Anchor, the Bull that wins. Our Berkshires were unbeaten wherever shown. Write for prices.

Please mention the Southern Planter.



NF

HOLSTEIN-FRIESIANS.

Sons of

"Pontiac Calypso's Son"

Dam-Pontiac Calypso, A. R. O. 28.43 lbs.

Sire's Dam-Beryl Wayne,

A. R. O. 27.87 lbs.

We have a few very fine service bulls left for sale by this sire, and several bull calves from some of Hygeia Herd's best females.

Individuals are right; breeding is right; prices are right.

Get in the line of progress. Write to-day for prices and pedigrees.

Address: Crozet. W. F. Carter, Jr., Agt.. Albem. Co., Dr. W. F. Carter, Prop. Virginia.

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 All stock in best condition and guaranteed as represented. F. T. ENGLISH, Centreville, Md.

Farmington Stock Farm

(Owned by Warner Wood's estate.) Short Horn Cattle.

Yearling Heifers and young bulls for sale at farmer's prices. Pedigrees furnished. Trains stop on farm. First station west of Charlottesville, C. & O. Ry. Write for further particulars to P. E. McCAULEY, Mgr. Birdwood, Va.



Reg. Angus Cattle Yearlings and Calves for sale. J. P. THOMPSON, ORANGE, VA.

till they are clear. They may be seasoned with lemon or pine apple, and make a variety.

Alcohol Preserves.

Take one pint of pure alcohol: add to it five cents' worth of salycilic acid; put this into a three-gallon jar and add to it each fruit in its season, with a pound of sugar for each pound of fruit until you have two and a half gallons. Pour a little drop of alcohol on top and tie up the jar: It takes some time to ripen, but is delicious with plain ice-cream or just to be used as a preserve. . The black fruits do not succeed as well for this as the light kinds ---strawberries, raspberries, apricots, pears, peaches, apples, lemon, orange, grapefruit—all in the same jar, stored together will be found to be quite variety enough. This is really better made with fine brandy, but it is more costly.

In putting up your preserves drop a few drops of glycerine on top and they will not mold.

CARAVEN.

THE WHITE PLYMOUTH ROCK CLUB.

The annual catalogue of the White Plymouth Rock Club will be issued within the next month or two. All interested in White Rocks should be members. The annual dues are only \$1.00 (which includes initiation fee). This is one of the strongest and most influential specialty clubs in America. The names and addresses of all members are given in the handsome catalogue. Yours should appear also. Surely you can afford the small amount of \$1.00' for so much benefit. Write for advertising space. Rates low. Address R. W. Haw, State Secretary for Virginia, Manchester, Va., R. F. D. No. 1.

OUTWITTED THE LANDLORD.

When recently leasing a house in a fashionable suburb of Philadelphia the lessee failed to examine closely the terms of the lease. After a time his landlord called and reminded him that he was bound to do all the outside painting at certain intervals. The tenant protested in vain; so he engaged painters and ordered them to paint the whole front of the house red, white, and blue-in stripes.

When it was finished the neighborhood rose up in arms, and the landlord was frantic. The tenant politely explained that there was nothing in the lease about the color, so he intended to finish the job by painting the back of the house green with large yellow spots. The landlord saw that he had met his match and within a few days the tenant had a new lease in which the landlord undertook to do all the outside painting.

-Sepember Lippincott's.

Fine ANGUS Calves AT. FARMERS' PRICES.

Several 15-16 Grade Angus Bull Calves ready for service. Will make superb bulls for grading up herds. Several Registered Angus Bull and

several Registered Angus Bull and Heifer Calves. Fine individuals, whose development has been pushed since the day they were dropped. Two beautiful registered yearling Angus heifers, just bred to our herd bull, at \$60 each. Two splendid 3 months old registered bull calves, at \$40 each. All these calves will be sold at farmers' prices. Write at once if you want one of them.

want one of them. W. M WATKINS,

Saxe, Charlotte County, Va.

3 Pure Bred

ANGUS BULL CALVES

For Sale Cheap

C. T. JOHNSON,

Beaver Dam, Va.

ANGUS CATTLE. SOUTHDOWN SHEEP. ESSEX PIGS.

One choice Angus Cew, 5 years old; two choice Pure Bred Bulls, one and two years old. A number of South-down Lambs, May, June and July de-livery, and a few Essex Pigs for July and August delivery. L. G. JONES, TOBACCOVILLE, N. C.

VALLEY FRONT FARM.

Sassafras, Gloucester Co., Va.

I have a nice lot of registered Here ford Bulls and Helfers, for sale at farmers' prices. Also a number of grade Helfers and cows. My herd rep-resents best strains and choice individuals.

Wm. C. Stubbs, Prop.



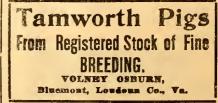
The dual purpose type. If interested the best farmers' cattle on earth, in the best farmers' cattle on earth, write for photos and records of ours. We will interest you sure. in

H. B. ARBUCKLE, Maxwelton, W. Va.

SHORTHORNS

Scotch and Scotch topped bulls ready for service and bull calves, cows and heifers for sale. This herd represents the most noted blood lines and the prices are low.

LESLIE D. KLINE. Vancluse, Va.



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



Rates 2 cents per word. Cash with order. Initials and figures count as one word; 25 cents minimum charge.

POULTRY, ETC.

- FOR SALE—S. C. BROWN LEGHORNS, cocks and hens, cockerels and pullets. from "Braces" prizewinning strain, at Madison Square show at New York, also Richmond Poultry Show. None better on earth. Get some good males and improve your flock. Prices reasonable. Address Evergreen Farms, Rice Depot, Va.
- SILVER SPANGLED HAMBURGS— Partridge Wyandottes, Silver Laced Wyandottes, Cornish Indian Games, White Rocks, \$2 each; trio \$5. Also White Crested Black Polish, turkeys, ducks and guineas. Write for prices. Circular 15 varieties. A. E. Parsons, Berkshire, N. Y.
- FOR SALE—S. C. Rhode Island Reds. That are red to the meat. Best all around fowl on earth. Cocks are good to cross on any breed. Have both fancy breed and utility stock. Prices in reach of all. Address Evergreen Farms, Rice Depot, Va.
- FOR SALE—100 S. C. BUFF ORPINGton cockerels from York, Hagerstown Washington prize winners. My birds win everywhere shown. Satisfaction guaranteed. A. J. Streett, Forest Hill, Maryland.
- MY PRIZE PEKIN DUCKS-BOTHERing neighbors, must sell. \$2 ducks, 90c. each, \$10 dozen. Fancy Berkshires, cheap. Good enough for blue ribbons this fall. Thos. S. White, Lexington, Va.
- WILL SELL FOR LIMITED TIMEsome fine cockerels at 75c. Buff Orpington, Black Minorca, R. and S. C. Brown Leghorns, and White Wyandottes. Mrs. Frank Johnson, R. F. D. No. 1, Louisa, Va.
- ENTIRE STOCK OF OVER 100 MAMmoth Pekin Ducks for sale. Early hatched breeders of finest strain; ready for laying. Satisfaction guaranteed. Price \$1.50 each. Address J. B. Watts, Pulaski, Va.
- WALKER'S WHITE PLYMOUTH ROCK Cockerels and Pullets are fine, large, well-developed youngsters from fine laying stock. Write for prices. C. M. Walker, Herndon, Va.
- BARRED PLYMOUTH ROCK ANR S. C. B. Leghorn cockerels, hens and pullets for sale. River View Poultry Farm, Mrs. C. M. Bass, Prop., Rice Depot, Va.
- WANTED—COCK OR PAIR VERY small variety white bantams, with yellow legs and large top-knot. Address: 1118 Senate St., Columbia, S. C.
- WHITE WYANDOTTES-PRIZE WINners and splendid egg producers. Summer cut price egg sale now on at 20 for \$1.00. Sunnyside, Jonesville, Va.
- SILVER LACED WYANDOTTE COCKS and cockerels for sale. Terms very reasonable. Mrs. Fannle Carter, Rice Depot, Va.
- WANTED-SPRING HATCHED PARtridge Wyandotte cockerel. Address stating price, O. L. Ligon, Sabot, Va.

FOR SALE-60 WHITE LEGHORN hens, 60 spring pullets, 8 males, at \$1 each. Address D. W. Tuggle, Gladys, Va.

LIVE STOCK.

- RED POLL BULL CALF OF GOOD breeding, eligible to registry, for sale at a reasonable price. Pedigree on request. B. H. Carter, Rice Depot, Va.
- CHOICE O. I. C. PIGS FOR SALE— Either sex, \$5 each; pedigrees furnished. Also registered Short Horn and Polled Durham calves. J. L. Humbert, Charlottesville, Va.
- YEARLING PURE-BRED COTSWOLD Rams, 200 lb. carcass and heavy fleeces; also ewes to be bred to rams, all tops Canadian flocks. E. C. Legge, Kents Island, Md.
- TWO GOOD, HEAVY WORK HORSES for sale at a bargain. For prices and particulars, address Samuel Cramer, Route 2, Houston, Va.
- BEFORE BUYING YOUR BERKshire Pigs write me for my prices and breeding. It will pay you. Dr. Charles G. Cannady, Roaneke, Va.
- HAMPSHIRE DOWN SHEEP AND Yorkshire hogs; Boars, bred Sows; Pigs at weaning age, only \$5 each. J. D. Thomas, Round Hill, Va.
- MULES FOR SALE.—FIVE WELL grown, 3-year-olds, unbroke and two 2-year olds cheap. Jake Goldsmith, Fredericksburg, Va.
- REGISTERED HOLSTEIN BULL-2 years old, mostly white, bred by Carpenter, of Pa., for sale. S. R. Carter, Ashland, Va.
- A FEW MORE FIRST CLASS REGIStered Duroc JJersey pigs 4 months old, only \$10 each. L. G. Blankenship, Box 202, Roanoke, Va.
- TWENTY YOUNG ANGORA DOES FOR sale. \$100 takes them. D. J. Lybrook Banner Elk, N. C.
- BEST BREEDING OF YORKSHIRE hogs at farmers' prices. W. E. Stickley, Strasburg, Va.

REAL ESTATE.

- FOR SALE OR WILL TAKE IN EXchange a Va. farm not over \$2,500., a good place of not over 45 acres 8 miles from Richmond, new house, plenty of good fruit of all kinds, good neighborhood, near R. R. and electric road, school, and church, R. F. D. In reply send description and price. Address "Owner," care Southern Planter.
- FOR SALE— FARM OF ABOUT 40 acres near Crozet, Va. Land adapted to Peach and Berry growing. These crops bringing highest market prices from this section. Suitable place for party of moderate means. Six room dwelling barn and other outbuildings. Young orchard also. F. C. Louhoff, Yancey, Mills Va.
- FOR SALE, TWO STORE LOTS AND one store house and lot, all fronting on the Court House Square, Mocksville, N. C. Good business stands, Address "Owner," Box 19, Mocksville, N. C.
- FINE OLD ESTATE, 1,100 ACRESfor sale in whole or parts. Half price if taken soon. Located on York River. Address Box 286, Willlamsburg, Va.

- I WANT TO RENT GOOD FARMone to three hundred acres, Piedmont section; have teams and tools; X, care Southern Planter.
- CHEAP LAND WHERE INVALIDS get well without medicine and raise \$200 in fruit per acre. Eden Fruit Colony Company, Dewberry, Harnett County, N. C.
- SELL YOUR FARM DIRECT TO buyer. Write J. H. Bonnell, Jamestown, N. Y.
- FOR SALE-120 ACRE FARM; GOOD house and other outbuildings, horse, cow, and all farm implements. Price \$1,700. Aug. Jansch, Wattsboro, Va.
- BUY BEST VIRGINIA FARMS DIRECT of owner and save money. Write J. H. Bonnell, Jamestown, N. Y.

POSITIONS-HELP.

- WANTED-BY AN EXPERIENCED young married man, place as working manager of a stock farm. Am well up on the breeding, handling and fitting for show ring. Have had 8 years' experience at dairying and several years with beef cattle. Have been very successful at breeding and in the show ring with Berkshire hogs. Am well up on the growing of grain, grasses, clover and root crops. Have had ten years' experience with ensilage making. Want a good, permanent place. Address W. L. care Southern Planter.
- POSITION WANTED-BY PRACTICAL poultryman of 18 years experience, with man having capital who will establish a poultry and egg farm. The advertiser is thoroughly experienced in feeding for eggs and will plan, build and manage plant on salary until plant is on paying basis. Then part of profits as compensation. Best of references. Address P. L. W., care Southern Planter.
- POSITION WANTED-BY EXPERienced and reliable poultryman, on private estate or commercial plant. Experienced in breeding fancy.utllity and market poultry, the running of incubators, brooders and all modern appliances, building and establishing poultry plants, etc. Open for engagement Nov. 1st: Reference from present employer. Karl J. Heumann, 1544 N. Wash. St., Balto, Md.
- WANTED FOREMAN FOR MY small country place near Richmond; married man preferred; must be sober, intelligent, progressive; good house and wages. Address "Battle Axe," care Southern Planter.
- WANTED MARRIED WORKING foreman on small stock farm in Southside Virginia. Pure bred cattle and horses, corn and grass raised. Address B. S., care Southern Planter, stating age, experience, nationality, and size of family.
- POSITION WANTED AS FARM MANager; understand improvement of land, general farming, stock raising, especially dairying. Address U. G. S. Care Southern Planter.
- WANTED-RELIABLE MAN AND wife to take the stock and a small farm and Post Office on shares. Will give life-time lease to right party. Box 40, Kendalia, W. Va.
- WANTED-BY PRACTICAL NEW Jersey farmer, single, 45 years of age, with reference, position as manager or foreman of large estate or farm. Can keep accounts. Address New Jersey, care Southern Planter.

POSITIONS-HELP. (Continued.)

WANTED-WHITE MAN WITH small family to attend stock and do general farm work. Write stating wages expected to J. T. Oliver, Allen's Level, Va.

POSITION WANTED BY AN EXPERlenced young man (single) as working foreman on farm. Address H. Beyer, Palls, Va.

MISCELLANEOUS.

THE GREAT YADKIN VALLEY FAIR —Salisbury, N. C. October 20, 21, 22, and 23, 1908. The premiums on most of the Live Stock at this Fair are open to the world. There is a big demand for improved live stock in the Piedmont section of North Carolina. For premium List and other information address M. L. Jackson, Pres. Wm. James, Secy.

FOR SALE-WILL YOU BUY A money maker at half value. Read and investigate. Four miles from the city of Binghamton, N. Y. 375 acres; sixteen room slate roof house; basement barn, 40x100, carriage house; four hundred fruit trees; milk sold at door; everything up-to-date; must go. Price \$8.000. One-half cash, balance five years at 5 per cent. Hall's Farm Agency, Owego, N. Y.

OUR JAPANESE SISTERS. , "Traveler."

It would be impossible to imagine a greater contrast than exists between the American woman of to-day, complete mistress of every situation, and the timid, fluttering little Yuki-Van's, all draperies. The Japanese women seem so child-like and innocent, it is hard to take them seriously at all, and not as so many gay butterflies fluttering about.

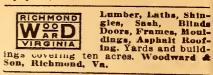
From the cradle, they are taught to make themselves pleasing in appearance and manner, and by this code, they live to the end. With Spartan severity they are taught to smile on, though their hearts may be breaking, of which there were many examples in the late war. Their whole life is one of discipline and self-restraint.

Opinions differ as to the beauty of the Japanese women. It is a matter of taste. To me, many of them were exceedingly pretty, and all, from the highest to the lowest, have an indescribable charm, partly from the sweetness of disposition, partly from their extreme consideration for others, andbeyond this, some elusive fascination, probably the spell of the East.

This is particularly true of the Geishas, so coy and flirtatious,—these professional charmers, who serve delightful tea and rice cakes in the tea houses, with a thousand little tricks to please. A misapprehension exists in some minds as to the type the Geishas represent. They are supposed to correspond to the grisettes of Paris, but they are not to be confounded for one moment with that class, which wears its obi or sack—tied in front, as its badge of shame. To be sure,

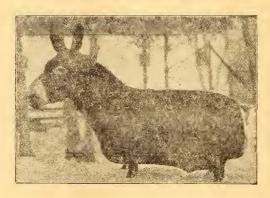
- FOR SALE: ONE LITTER PEDIGREED Beagle pups, 3 months old, of proven hunting stock and well grown. Price \$5 each. Also a male and female thoroughbred bull terrier, each 5 months old. Price \$10 each. Dr. C. T. Smith, Croxton, Va.
- WANTED-TO BUY ALL KINDS Wild Birds and Animals, particularly Tame Deer, Wild Turkeys, White Squirrels, Peafowl, Otters, Red Foxes, Grey Squirrels, Partridges, Pheasants, Beaver. State price when writing. Dr. Cecil French, Naturalist, Washington, D. C.
- OH MY; BUT DON'T THAT CORN hurt? Well, why don't you send for some of my corn plasters and get cured. Only 10 cents each or 3 for 25 cents. LeRoy's Bargains, Box 202, Roanoke, Va.
- FOR SALE OR EXCHANGE—ITALIAN Bees, \$5 per colony; honey in 10 lb. pails, 6 pails per case, 8c. per lb.; in 60 lb. cans, 7½c. per lb.; W. P. R. Pullets, 50c. up. B. F. Averill, Howardsville, Va.

NEARLY READY—A TREATISE RENdering latitude and departure land calculations easy and self proving. Send your order to I. F. Raudabaugh, Celina, Ohio. Cloth, \$1.50; paper \$1.25.



- WANT 200 BUSHELS OF SEED RYE and 25 of beardless barley F. O. B. Norfolk. Send samples and price to C. F. Hodgman, Waterway, Princess Anne Co., Va.
- WANTED TO SELL CHEAP—A 20 inch Ohio Ensilage Cutter with a 20 foot carrier; in good condition. Address, P. O. Box 192, Richmond, Va.
- TERRACING? DITCHING? GRADING? Best \$10 farm level for \$6.66. Write at once for special offer. Frank Wright, Mf., Cave Springs, Ga.
- BEAUTIFUL SOUVENIR POST CARDS only 10 cents per dozen. LeRoy's Bargains, Box 202, Roanoke, Va.
- FOR SALE CHEAP-GINSENG SEED and roots. S. A. White, Timberville, Va.

This is Not a Mule-Headed Hog



But is made this way in the cut to attract your attention. I have over 200 Duroc pigs which I think cannot be beaten for quality in the United States, and I am offering them in pairs and trios (not akin). Any farmer who is raising hogs for the market, I believe, can add \$500 to his stock of hogs by buying one pair of my Durocs and starting a full blood herd of his own. My March pigs weigh about 150 to 200 lbs. each. I will sell selects at \$50 per pair, or one male and two females for \$75, crated, on board (Express) cars. I have in my herd such celebrated strains as Tip-Top Notcher, 71202, Pilot Wonder 9017, Lord Roberts, 17329, Com Paul

Lord Roberts, 17329, Oom Paul 7545, Orion 5393, Crimson Wonder 2nd, 31373, Gold Finch 7549, Top Notcher 8803, I. J's Chief 12446, Red Shief O. 18317, Iowa Chief, 52953, Big I Am, 20,895, Ruddy K. 4th, 20861, Indicator, 20465, Peter the Great, 51,085, Advancer, 11,309, Treasure Box, 32205; Red Prince 22929 and others. I am breeding for size and bone together with strength and vigor. My pigs roam in clover fields and are the strong, vigorous, healthy type. I have never had any diseases or sickness among my stock. I am prepared to furnish you an extra pair at a small price. The most perfect cherry red color that I have ever seen predominates in my herd. Do not hesitate to order at once. I will send you a pair fit to show at your coming Fair. Complete registration certificate with pedigree furnished with each animal.

W. L. DeCLOW, Cedar Rapids Jack Farm.

Cedar Rapids, Iowa.



Buy from those who givs their sole attention to the production of the greatest Berkshire Type.

Our herd comprises the most splendid lines of breeding and individuals that mouey can buy or experience develop in American and English Bred Berksbires.

"LORD PREMIER OF THE BLUE RIDGE," 103555, the greatest living boar, heads our herd. If you are interested write.

THE BLUE RIDGE BERKSHIRE FARMS, ASHEVILLE, N. C.

1908.]

Economical Feeding

Your problem, Mr. Farmer, is to convert each hundred cents' worth of your corn into a dollar's worth of pork, *plus a profit*. Turning corn into pork, the feeder becomes a manufacturer. His grain represents the raw material and his animals' appetites and digestion the machinery. Everything depends upon digestion. Increasing the stockman's profit

by increasing digestion is known as "The Dr. Hess Idea." His education as a doctor of both human and veterinary medicine has been employed, together with years of experimenting, to produce a preparation that he could guarantee to improve the appetite and increase digestion; besides relieving the minor stock ailments. In



the best tonics known to science are employed to whet the appetite and increase the flow of digestive juices. It also contains iron, the greatest blood and tissue builder; nitrates are employed to help nature throw off poisonous waste material that becomes deposited under heavy feeding. Mild laxatives also regulate the bowels. These ingredients are recommended by every great medical writer, and Dr. Hess (M.D., D.V.S.) has found them to be just what the animal system requires. Remember that market stock are fed in absolute violation to nature's plan. Stock were not intended to be crowded and stuffed to the very limit of their digestive capacity. Apply this course of feeding to yourself and what would be the result? This is what we can guarantee for Dr. Hess Stock Food: First-It pays for itself in increased growth. Second-

It gives stock a smoother, healthier appearance, and they bring a better price. Third-You save money by keeping your animals free from disease. Fourth-Your stock like it, as it seasons and flavors their food and produces a relish that also aids digestion.

100 lbs. \$5.00: 25 lb. pail \$1.60

The dose of Dr. Hess Stock Food is small and fed but twice a day. Sold on a Written Guarantee. **1bs. \$5.00;** Except in Canada and extreme West and South. **1b. pail \$1.60** Smaller quantities at a slight advance. Dr. HESS & CLAR Ashland, Ohio. ARK,

Also manufacturers of DR. HESS POULTRY PAN-A-CE-A and Instant Louse Killer. FREE from the 1st to the 10th of each month—Dr. Hess (M.D., D.V.S.) will prescribe for your ailing animals. You can have his 96-page Veterinary Book any time by sending a two-cent stamp. Mention this paper.

DR. HESS POULTRY PAN-A-CE-A is "The Dr. Hess Idea" for poultry. It increases growth and egg production by increasing digestion. A little of it given every day in soft feed corrects any tendency there may be toward indigestion and consequent nonproduction. It has in it bitter tonics which act upon the digestion; iron for the blood; and nitrates to cleanse the system. It makes a full egg basket; causes a cockerel or old hen to fat rapidly; helps tide over the moulting season; and saves thousands of little chicks every year. It also cures gapes, roup, cholera, etc. Endorsed by leading poultry associations everywhere. SOLD EVERYWHERE ON A WRITTEN GUARANTEE.

1% ibs. 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.

Send 2c for Dr. Hess 48 page poultry book, free.

INSTANT LOUSE KILLER KILLS LIGE

several distinctions ar highly drawn in Japan. The poor girl, who keeps up her family by a life of infamy is commended rather than condemned for her course.

The society ladies of Tokio are very amusing in their Paris finery. The fitted gowns show off to greatest disadvantage those figures, so plainly intended for draperies, and the layers of paint and powder they lay on with these costumes are simply grotesque. We saw them at some of the court functions with tiaras of diamonds on their heads, and high French heel slippers, and could not suppress our smiles at the spectacle. In their place, I would never discard their comfortable sandals, even if the kimonas had to go.

Widely differing from these is a class that interested us very much, namely, the peasant women, dressed, in the garb of a man, and doing man's

High-bred Cows Fresh to Pail. Helfers Bred to Calves in Spring. Bulls-All Ages-A Few Ready for Service.

JERSEY CATTLE.

San Andrew State of the State o

BERKSHIRES.

All Ages and of Excellent Breeding. Get my prices before placing your order. EVERGREEN FARMS, W. B. Gates, Proprietor, RICE DEPOT, VA.



A grandson of Lord Premier's Rival the great \$10,000 boar, and two granddaughters of Master Piece at onethird Western prices.. Could breeding be better? The pigs equal their breeding. Also other good ones.



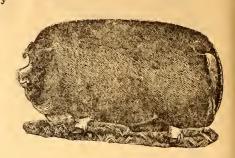
MOORE'S BROOK SANITARIUM COMPANY, CHARLOTTESVILLE, VA.

[September,

Poland Chinas and Shropshires



A choice lot of pigs sired by my fine boars, Ds Corrector, 2d., 72433, Son of D's Corrector 98157 and Big Jumbo 64275. D's Corrector was a half brother to the Senior champion boar at the St. Louis World's Fair. Half in-terest in his sire sold for \$2,500 and his dam is a full sister to Maple Lawn Chief, first in age class at St. Louis. Big Jumbo was bred by W. S. Powell of Kansas and sired by the 1,100 lb. hog, Perfect I Am, 50767, and out of the 700lb. sow. Lady P. Sanders, 79040. SHROPSHIRE LAMBS. A choice lot sired by my Imported Ram, Altamonts, 666. This ram was imported by G. Howard Davidson of New York, and purchased by my brother, the late J. F. Durrette, in 1906.



W. O. DURREYTE, Successor to J. F. DURRETTE, Birdwood, Albemarle Co., Va.

work in the field, or as pack horses on the highway. Budhist regard for animal life leads them to spare their beasts, but great burdens are piled on the women's backs, who bear these, as their other burdens, without a murmur.

The Red Cross nurses of Japan have gained a notable distinction. Dressed in white uniform and caps, with the red cross on their left sleeve and cap band, they stand ready to bring relief to all sufferers, whether on the battlefield or in the home.

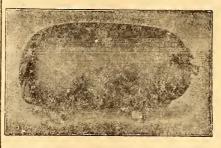
The amales, or traveling maids, are abundant, wherever tourists are found, and add much to their comfort. I also think with much affection of the dear little women in the toy shops selling us dainty trifles of the East, admiring our Western clothes, trying on our ring and beguiling us with soft flatteries.

The school girls of Japan are picturesque figures in long red fleeced skirts over their kimonas, as they troop by to school by hundreds in their zeal for education. We visited one of the mission schools in Tokio, where Miss Takahua, daughter of our present Japanese ambassador, was introduced to us. The girls were having their music lessons, and the most ex-cruciating sounds issued from the pianos.

The "new woman" movement of Japan, of which the Marchioness Oyama is the head, is on a most dignified basis. It seeks better education and better opportunities for women,a larger view, and general improvement, without the wails of the suffra-gettes. Even in ages past, Japan produced great women, as for example, the powerful Empress, Ingo,, and numerous poetesses and authoresses.

In face of facts, let us not boast too much of our vaunted superiority over our gentle sisters. Despite our great intellectual achievements there are many lessons we can learn from them in the art of living and the eternal harmonies.

On the whole, the condition of wom-



OUALITY POLAND-CHINAS

The large, mellow kind-NOT the coarse and rough type. They must be good with such .a herd header as BLACK PERFECTION, a son of the old king of Poland-Chinas, Chief Perfection II. A few CHOICE PIGS and BRED SOWS for sale.

H. B. BUSH & BRO.,

Michaux, Powhatan Country, Va.

POLAND-CHINAS AND BERKSHIRES A nice lot of pigs, 6 to 8 weeks old at \$5. TAMWORTHS 3 months old, \$7.50; Bred sows, \$15 to \$25. J. C. GRAVES, Barboursville, Orange Co., Va. FINE S. C. Rhode Island Reds. Your Opportunity.

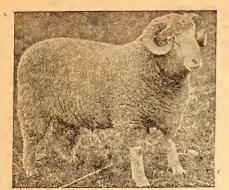
Pursuant to custom, I will dispose of half of my S. C. Rhode Island Red breeders, about 46 one and two year old hens, to be replaced in my yards by young stock. When I say that these were in my breeding yards of this sea-son, and that never have I raised such high-class exhibition stock as is now maturing, enough is said of quality. I will mate two or more of these with April-hatched cockerels for the trade for \$2.00 each around, and will guarantee that they are better than \$5.00 fowls purchased in the spring. A few promising cockerels \$2.00 to \$5.00. If you wish good Reds at a real bargain, this opportunity must be ac-cepted quickly, for like Christmas, it comes but once a year.

DR. J. H. C. WINSTON, Hampden-Sidney, Va.



FOR SALE.

High-bred cows, fresh and due to be fresh fall and winter. Berkshires of all ages, excellent shape and breeding. Bradley Bros.' Barred P. Rocks, cockerels and hens. Brace's S. C. Brown Leghorns, cockerels, hens and pul-lets. RIVER VIEW FARM, C M. BASS, Prop., Rice Depot, Va.





I beg to announce that on and after July 1st I shall have, until late fall. Good, Strong Breeding Ewes from two to four years old, and can furnish them in small numbers or car lots. Write for prices. Information cheerfully given

I handle all kinds of Live Stock on Commission, and give best of satisfaction. If you have Cattle, Sheep, Lambs, Calves or Hogs for sale write me. I give accurate information. Weekly quotations furnished free for the asking.

ROBERT C. BRAUER, Live Stock Commission Salesman, RICHMOND, VA. Address: P. O. Box 204. Office and Pens, Union Stock Yards.

an in Japan seemed to me quite desirable and eminently suited to their temperament. It is true that her individuality cannot assert itself to any great extent, but she becomes a mother-in-law—and submission is the keynote of her existence.

This would not suit American women at all, but then we think for ourselves, and the Japanese women have never learned to do this. When sufficient number of them have learned to think, some mighty changes will result to sweep away one of the most ideal types of woman, that any civilization has produced.

Like the Greek ideal of beauty, it will ever remain an ideal, even when the type ceases to exist.

STILL GROWING.

A crippled peddler came hobbling to our door one day, and my aunt sympathetically inquired the cause of his lameness.

"You ain't Christian Science, mum, be ye?" he asked. "No, I s'pose not. It's jest my luck. Well, mebbe you know of two kind-hearted old ladies livin' together—you can't mistake 'em; one has a squint an' the other has a mole alongside her nose. No? Well, I'm not goin' to miss 'em for not askin.' I want to see them old ladies mighty bad."

It transpired from his artless ramblings that he had fallen when a child and injured his hip in such a way as to check the growth of his left leg.

left leg. "But," interrupted my aunt, "your left leg is-----"

"Yes, mum, I'm a comin' to that presently. A year ago I sold a paper of pins to two old ladies in Broomwich, as 'lowed that Mother Eddy's method would lengthen that leg. Seemed to me I'd heard of leg-pullin' in that connection, an' I jedged I might as well give it a try, so I told 'em to go ahead with their absent treatment. Mebbe you can guess how tickled I was when that short leg actually began to grow by the follerin' week. It kep' on growin' steady, and within six months I was

GREAT BERKSHIRE OFFERING.



Scores upon scores of Fancy Dandy Berkshire Spring Pigs now about ready for shipment. Price and safeguards for customers are made perfectly satisfactory.

for customers are made perfectly satisfactory. My experience with pigs reaches b.ckward forty-one years. I give all my time and attention to the business. I realize the policy, aside from principle, of having satisfied customers. If you want fancy breeding, accompanied with individual merit at popular prices, write me, as I have some of the blood of all the Grandees.

THOS. S WHITE AND POULTRY FARM, Buy some genuine Pekin Duck Eggs from me at \$1 for 12 and thereby get on the road to fortune.

Brompton Stock Farm.

Several two year old Jersey heifers, calves by side, of superior quality. Two year old Jersey bull and a yearling Jersey Bull-all of Golden Lad strain.

Also a fine lot of high grade Guernsey and Jersey heifers, one and two year old. These heifers are from first-class cows and will make superior dairy cows.

Berkshire Pigs not akin. Collie and Fox Terrier pupples—all of above ready for shipment. Come and see them.

M. B. ROWE & CO, Fredericksburg, Va.

Little Can

FOR SALE!

SIX BERKSHIRE GILTS.

FINE INDIVIDUALS.

TWO BOARS.

Forest Home Farm, PURCELLVILLE, VIRGINIA.



Every Farmer Should Have His Own Thresher "Little Giant" Thresher runs with light power and will clean all kinds of grainwheat, rye, oats, rice, flax, harley, kaffir corn and grass seeds. Attachments for hreshing cov peas and for "pulling" peanuts. Made in three sizes-for 3, 6 and 8 4. P. Gasoline Engine. Any power can be used. We also make Level-Tread Powers. 'eed and Ensilage Cutters, Saw Machines, etc. Send for FREF catalogue. HEEBNER & SONS, 25 Broad St., Lansdale, Pa.

[September,

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

ROSE DALE STOCK FARMS, JEFFERSONTON, VA.

again in Broomwich with two ekal legs an' a heart full of gratitude for them kind ladies. Weil, they was gone. I never had no chance to thank 'em. I didn't mind that so much, but in another month, I seen my left leg was still a-growin'—didn't know enough to stop. I went to Broomwich in a hurry, an' tried to find out where they'd moved, but nobody knowed. Well, good day, mum, I'll be joggin' along, for I've got to find them old ladies and switch their treatment on the other leg. Needn't tell me thr's nothing in Christian Science!"

-September Lippincott's.

Boston, Mass., May 11, 1908. Tuttle's Elixir Co.,

27 Beverly St.,

Boston, Mass. Gentlem**en:**

For some time I have felt that it would only be fair to you to express in writing the very satisfactory re-sults that I have derived from the use of your Elixir, both family and veterinary. I had a very valuable horse that went lame; I called in two reputable veterinaries and both gave it as their opinion that he had a jack spavin. I was not satisfied that such was the cause and you may recall my driving the horse down to your office, when you diagnosed the case as "stifle lameness." The The case was entirely cured by the use of your Elixir as directed and the horse was sold for a large price in New York.

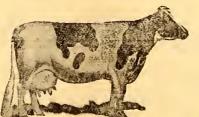
I have recently had great success in the cure of a case of shoulder lameness without blistering or the use of a seton, and I have also found the same of great value in treating two of my little dogs for rheumatism. I would not be without Tuttle's either in my house or stable as experience has taught me beyond a question that it is the best remedy for the purposes outlined that I have



Continues steadily along furnishing cattle of the better class and choicest breeding at the very lowest prices consistent with high quality. Two better bred bulls than "Baron Roseboy" 57666, and "Jester," 60071, are not owned in the South, and the females of the herd were sired by some of the most famous bulls of the breed. Young calves only for sale.

A. L. FRENCH, Owner, Station, Draper, N. C. at the farm. R. F. D., Byrdville, Va.

THE GROVE FARM. HOLSTEIN-FRIESIANS.



Four registered Bull Calves from 2 to 3 months old out of heavy milkers, for sale. Let me price you one.

Registered

Berkshires.

Future delivery orders only, taken at present. URKEVILLE, VA.

T. O. SANDY, B URKEVILLE, VA. N. & W. and Southern Railways.

Silver Spring Farm Registered Shropshire Ram Lambs



For sale from Ewes of Mr. H. L. Wardwell's breeding. They are as well bred as any in this country.

Although my sale is over, there are some Shorthorns on the farm for sale. Both sexes. Some very fine Cows at fair prices.

ROBERT R. SMITH, Proprietor,

Charles Town, W. Va., or Wickliffe, Va.

for the purposes outlined that I have When corresponding with our advertisers always mention Southern Planter.

1908.]

MORVEN PARK ESTATE.

The Property of WESTMORELAND DAVIS, Esq.

A Selection of Stock Will be Exhibited at the Forthcoming VIRGINIA STATE FAIR,

RICHMOND, VA., Oct. 5-10 1908,

Including a selection of YEARLING GUERNSEY BULLS AND BULL CALVES which will be offered for sale. They are well grown animals of excellent quality, sired by our Herd Bulls---Imported "France's Jewel VIII" and Imported "Top Notch" and out of Advanced Register or other deep milking dams. They have all been recently tested by the United States Bureau of Animal Industry and bear the official tag of being free from Tuberculosis.

Also a selection of REGISTERED DORSET HORN SHEEP including a pen of four Ram Lambs for sale---sired by Imported "MORVEN'S BEST", Ist English Royal and twice 1st at Richmond, Virginia. These lambs are exceptional quality, grand bone and fine wool and fit to head any flock.

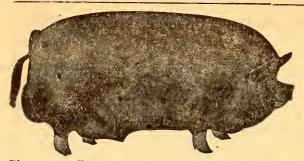
Also a selection of IMPROVED LARGE WHITE YORKSHIRES- Including some very fine young boars and weanling pigs for sale.

The public is cordially invited to inspect the various exhibits and to address enquiries at the Show to the attendant in charge.

Correspondence should be addressed to

LIVE STOCK DEPARTMENT, MORVEN PARK ESTATE, LEESBURG, LOUDOUN CO., VA 825

[September,



WOODSIDE BERKSHIRES EVERYTHING SHIPPED ON APPROVAL. IT WILL PAY YOU TO READ THIS CAREFULLY.

In order to make room for our fall litters, we will, for the next thirty days offer a grand lot of pigs from 2 to 4 months old for 25% less than our usual price. These pigs are sired by our 3 boars,

Charmers 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.

yet run across, and in the treatment of animals from a humanitarian point of view alone, it is worth its weight in gold.

You may make any use of this letter that you wish and I shall be glad to give my experience to any one that you may refer to us. With kind regards, I am

Yours very truly, F. R. P. ELLIS.

A REMINISCONCE.

Memory takes me back to the severe drought of the summer of 1838. After the tobacco crop had been planted and had hardly taken root, the drought came on. The tobacco buyers (manufacturers and exporters), became alarmed and prices for the old crop went to double or even higher than normal.

It was the custom of that time for the wealthy to spend some months at the White Sulphur Springs, as there were no railroads and nothing but circuitous stage coach lines, they used their private carriages.

I heard it said of Mr. Jno. M. Warwick, one of the largest (if not the largest) exporters of tobacco in Lynchburg, that he left home early in July, before any relief had come. Travelling slowly through the counties of Bedford and Botetourt, then comparatively new sections, where tobacco was principally planted, and fine crops of the best quality were almost invariably secured. The season changed early in August. On his return late in September, Mr. W. reported that on his way up he passed large fields planted in tobacco and near the roadside he could only see small plants still alive. On his return late in September, he reports: I never saw finer crops being cut and cured any where. Our farmers

BILTMORE FARMS, BILTMORE, N. C.

Jerseys. The high standard and show yard qualities of our Jerseys are known far and wide as the Jersey breed. The Biltmore Jerseys are business Jerseys.

During the past year our herd, including a large number of heifers and the dry cows, averaged 5,358.90 pounds of 5.38 per cent. milk.

There are 37 Churn-Tested Cows now at work in the herd.

A few young bulls and heifers, and also bred heifers for sale.

Berkshires We still have some beauties for sale-Boars and Sows.

Pointry Barred and White Plymouth Rocks, White Wyandottes. A splendid assortment of 1808 males and females for sale. White and Brown Leghorns. Of these we have only cockerels for sale.

Send for prices and so forth. Address-

BILTMORE FARMS, R. F. D. No. 2, Biltmore, N. C.

Glenburn Berkshires.

Lord Premier and Premier Longfellow are dead, but we have their best sons. Our LORD PREMIER III is not only a son of Lord Premier, but is a litter mate to Lord Premier II. and a brother in blood to Lord Premier's Rival. Our PREDOMINANT and DOMINANT are probably the best sons of Premier Longfellow. IMP. ROYAL HUNTER is a great individual. We have Lord Premier, Premier, Longfellow, Masterpiece, Chambr's Duke XXIII., and fine imported sows.

FORFARSHIRE GOLDEN LAD JERSEYS.

Write for Catalogue.

Dr. J. D. KIRK, Roanoke, Va.

Duroc Swine For Sale.

Durocs are the most prolific hogs on earth. They are also the most popular breed to-day because they give the largest returns in profits of any breed. Our sows averaged over ELEVEN pigs to the litter this year. We have the largest and most fashionably bred in the East. Sows. Gilts Herd Boars, and Pigs from eight to twenty-eight weeks old. Write for catalogue.

LESLIE D. KLINE, Vaueluse, Va.

Incorporated 1907.

"STANDARD OF EXCELLENCE."

26

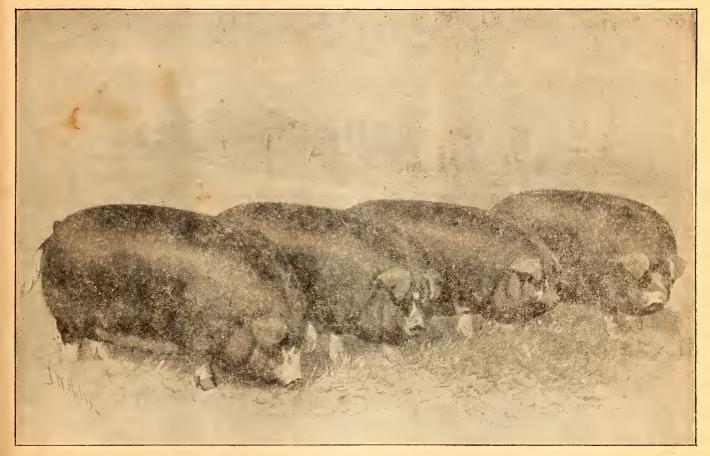
Capital Stock \$100,000.

THE VIRGINIA STOCK FARM CO.

Incorporated.

Bellevue, Bedford County, Virginia.

J. ELLIOTT HALL, General Manager.



Copyright 1908 By The Virginia Stock Farm Co., Inc. POLAND-CHINA GILTS.

Standard Types of the young matrons. Drawing by John W. Hills.

"INAUGURAL ANNOUNCEMENT"

Is the name of our first catalogue. It treats of the objects and purposes of The Virginia Stock Farm Co., Inc., and tells in a pleasing manner the reasons which lead to the founding of a concern which promises to play a vitally important part in advancing the live- stock industry in this historic Commonwealth.

THIS BEAUTIFUL CATALOGUE.

Will interest every one who is a farmer or an admirer of high class live-stock. It will be of material assistance to new breeders, as it tells which breeds are best adapted to the requirements of Virginia farmers. It is profusely illustrated with pictures of Standard Types of those particular breeds, made from original drawings by such world-renowned artists as George Ford Morris and John W. Hills. It will be

MAILED FREE UPON REQUEST.

Just write us a post-card giving your name; your address, either post-office box, rural route or street number; your city; county and State, and mention The Southern Planter when writing. Address the company as above, or the General Manager. Write to-day before you forget it.

DOIT NOW!

J. ELLIOTT HALL, BELLEVUE, VIRGINIA.

September,

in some sections may be discouraged at present, but let us sincerely hope and trust that two months hence conditions will be all that they can desire.

A. L. L.

ERRATA.

Please correct the following misprint in Article No. 2, published in July Goyarre for "Gayaare," the Louisianna historian, whose name is French, with accent on the final e.

A PERSISTENTLY GOOD MAGA-ZINE.

Lippincott's Magazine "pursues the even tenor of its way" regard-less of summer's heat or financial panic, each successive number being just as big, just as carefully edited, just as wholly satisfying. The Sep-tember issue has for its leading feature a stirring detective novel by Nevil Monroe Hopkins-"The In vestigation at Holman Square." It is published complete, of course, as is everything in Lippincott's. Dr. Hopkins's story has to do with a mysterious murder in New York City. His hero, a young electrician, becomes mixed up in it in a perfectly innocent way, yet he is placed under arrest and for a time finds himself in a serious position. The girl he loves is likewise brought under suspicion, as are a number of others. In fact, the plot is so cleverly complicated that the reader who can forecast the outcome will have good reason to pride himself on his astuteness. The mystery is finally solved by Mason Brant, a private detective, who has figured in at least two other detective yarns by the author.

Among the shorter stories is "The Great God News," the tale of a warcorrespondent by a war-correspondent-Will Levington Comfort. "Memories," by Fannie Heastip Lea, is a delightful love story with an unexpected denouement. "The Child "Deported," by H. C. Stickney, and "The Disaffection of Adelaide," by Laura Simmons, are also uncommonly good stories.

Of offerings other than fiction, there are "Socrates," the story of a pet owl, by Jennie Brooks; "Zelphine in Warwickshire," a charming travel sketch, by Anne Hollingsworth Wharton, and others by Jane Belfield, Herman Scheffauer and Robert



In order to encourage the sale of pure-bred stock at the Virginia State Fair, Richmond, I will offer

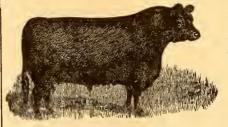
9 HEAD OF GRAND RED POLL

for sale, running from 6 months to 6 years of age, some of them prizewinners, including two champions; unexcelled in breeding and individality. I will also offer 7 head of Royally bred

POLAND-CHINAS

H. M. LUTTRELL, Ivanhoe Stock Farm, Delaplane, Va

RED POLL CATTLE.



I offer for sale 1 three-year-old bull. I offer for sale 1 three-year-old bull, 4 cows, 2 two-year-old and 3 yearling heifers; also 3 heifer calves. All regis-tered and eligible to registry in Red Poll Herd Book. Choice breeding and in good condition. Fine opportunity for es-tablishing a herd. Will sell lot or single individuals. Foundation stock selected from best Ohio herd.

JOS. E. WILLARD,

Address:

Fairfax, Va. A. C. Bleight, Supt.,

EXCELLENT

SHORTHORN HEIFERS AND BULLS.

By the Scotch topped Bull, Royal Lad (advertised by the old reliable breed-ers, 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 Can-ada as a lamb and a yearling. He was bred by Hon. George Drummond, the foremost Southdown breeder in America.

TO REDUCE THE ELLERSLIE STUD

One dozen good, big-boned thoroughbred Mares by Eolus, imp. Charaxus and Eon. Tney have foals by their side by the splendid stallion, Fatherless (sire of many good race horses, including the jumpers T. S. Martin and Aiken), and have been bred back to him. These mares bred to thoroughbreds should produce good hunters; bred to trotters, good roadsters; bred to hackneys, good carriage teams; bred to draft stallions, good express and work teams; bred to jacks, the best mules on earth.

R. J. HANCOCK & SON, "Ellerslie," Charlottesville, Va.

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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.

Ft. Lewis Stock Farm

DR. W. L. NOLEN, PROPRIETOR, SALEM, VA.



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For the Sale of

CATTLE, SHEEP, LAMBS, HOGS, FRESH COWS, CALVES

In Carloads and Small Lots.

To Buyers of Live Stock: We solicit correspondence from those wishing to buy Stock Cattle, Feeding Steers, Breeding Ewes, Feeding Wethers and Lambs; in fact, if you wish any kind of Cattle, Sheep or Hogs, we will seil them to you at lowest market prices. Pure-Bred HAMPSHIRE RAMS ready for delivery.

OFFICE AND PENS: UNION STOCK YARDS, RICHMOND, VIRGINIA,

'PHONES: OFFICE 1394; RESIDENCE 3224; P. O. EUX. 483

Adger Bowen. There are also some excellent poems and the humorous department, "Walnuts and Wine." This last feature is unique inasmuch as every jingle, jest, and anecdote in it is signed by the writer thereof. Fully half of the contributions are by unknown authors, the only requisite for admission being merit. This does not mean that the well-know funmakers are not represented, however. Thomas L. Masson, W. J. Lampton, and most of the other prominent humorists now before the public, contribute to it regularly.

Quite the most interesting bit in the alluring pages of the September St. Nicholas is the story of how that dearest of all children's classics, "Alice in Wonderland," came to be written, told by Henel Marshall Pratt. It is a charming tale of the friendship of a quiet, reserved, bookish young lecturer at Christ Charch College, Oxford, and of three dear children, daughters of the dean of the cathedral.

Boating on the river, with tea on the banks, and story telling along the way, was the favorite play of these four comrades; and of the many, stories told on these outings the adventures of "Alice in Wonderland" were written down to please little Alice Liddell, second of the children, later finding their way into print.

"So little did the author understand what a wonderfully ingenious and fascinating book he had written, that he did not expect the first edition would ever be sold. But the two thousand books were very quickly disposed of. Every one wanted to read 'Alice,' and to have his friends read it. Not only little children, but grown people enjoyed



We offer an exceptional opportunity to purchase at one-half price or less, all of the stock on this Farm, including

A HERD OF REG. SHORTHORNS—Herd bulls; bull calves, cows and heifers.

PERCHERON STALLION, MARES AND FILLIES.

BERKSHIRE SWINE, herd Boar pigs, etc

All these animals are in fine order, and many are being fitted for show, but will be sold any time before.

This farm and all implements and improvements are also for sale at reasonable and easy terms.

BLOOMFIELD STOCK FARM,

Jas.⁹H. Frazer,

Cartersville, Va.

THE HOLLINS HERD

HIGH-CLASS HOLSTEIN-FRIESIANS.

A working herd-working every day in the year.

During the months of April, May, June and July we milked

5 mature cows.

8 heifers with second calf,

6 heifers with first calf.

Total number milked, 19.

Gallons of milk per day, 80.

Per cent. of butter fat, 4.2.

Hollins Institute.

Bull Calves Two to Nine Months Old For Sale

JOS. A. TURNER, General Manager,

Hollins, Va.

DON'T BUY GASOLINE ENGINES UNTIL YOU INVESTIGATE THE MASTER WORKMAN," a two-cylinder engine; revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Come to Buy-Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or tractice the SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mirs., Meagher and 15th Sts., Chicago. THIS IS OUR FIFTY-FIFTH YEAR.

[September,

it, and edition after edition has been printed and sold, and to day it is even more sought after than when it was first published. It has become a classic and holds a place on chi!dren's book shelves with Robinson Crusce' and 'Hans Christian Ander-sen.' There is not a spot in the sen.' civilized world, not a library with any pretension to literature where the Jabberwock and the Cheshire Cat are unknown.

The frontispiece of this September issue is a reproduction of Elizabeth Sparhawk-Jones's "Roller Skates, which was exhibited at the one hundred and third annual exhibition of the Pennsylvania Academy of the Fine Arts.

The September Century's leading article is the first popular account given to the public of the Wright Brothers' aeroplane, written by themselves and liberally illustrated with pictures from photographs supplied by the authors. Their experiments-which are among the most interesting and important now being carried on in the scientific world-place these men at the head American aviators; and their of article is of special interest in view of the fact that they have contracted deliver to the United States to Government a machine, the trials of which are planned for late August.

Of far reaching interest and in. portance in the September Century is the discussion of "The Future Wheat Supply of the United States,' by Edward C. Parker, of the University of Minnesota Agricultural Experiment Station. He points out the many means which may be utilized to meet the future demands for wheat, prophesying that agricul-ture, still only in its infancy, is bound sooner or later to have a rapid and widespread development, and that the limit of its possibilities will be extended by each succeeding generation. Since writing the article Mr. Parker has been called to Manchuria by the Chinese authorities to organize an experiment station.

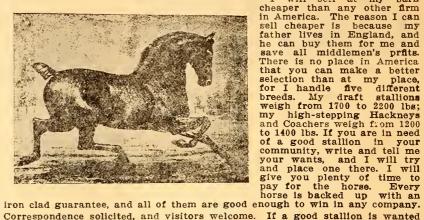
Two notable biographical articles the September Century are William H. Crook's reminiscences of "Andrews Johnson in the White House" (written by Margarita Spald-ing Gerry), and "The Early Life of Robert Fulton," by Alice Crary Sutcliffe, great-granddaughter of the inventor.

"The Reminiscences of Lady Randolph Churchili" are in September, as in the previous months, an absorbingly interesting feature of the Century Magazine.

Howard Co., Md., Feb. 24, 1908. I would not like to stop having the Southern Planter in our home. J. CLIFTON DAY.

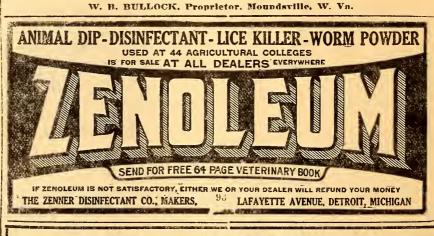
MOUND CITY STOCK FARM

Shires, Percherons, Belgians, Coach and Hackney Stallions.



I will sell at my barn cheaper than any other firm in America. The reason I can sell cheaper is because my father lives in England, and he can buy them for me and save all middlemen's prfits. There is no place in America that you can make a better

Correspondence solicited, and visitors welcome. If a good stallion is wanted in your community please write me.



BLUE GRASS FARMS

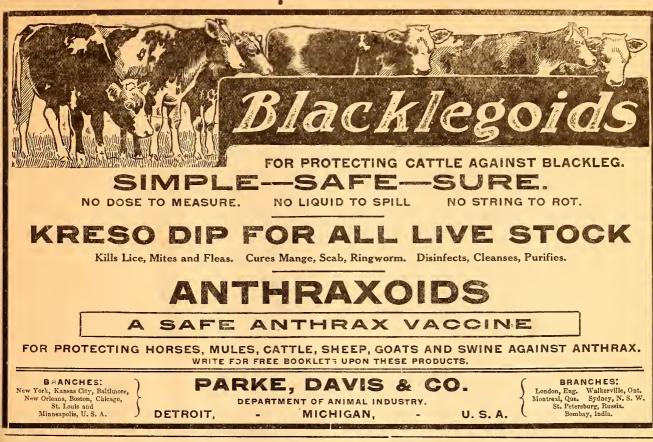
Some of our best blue grass farms range in price as follows, on easy terms if desired.

387 acres, improvements worth \$4,000. Price \$21,000.
195 acres, improvements worth \$5,500. Price \$10,000.
300 acres, improvements worth \$5,500. Price \$18,000. 300 acres, improvements worth \$5,500. Price \$18,000.
485 acres, you can borrow 70 per cent, imp, worth \$6,500. Price \$34,000.
342 acres, improvements worth \$7,000. Price \$20,000.
254 acres, improvements worth \$1,000. Price \$6,300.
264 acres, improvements worth \$1,000. Price \$6,300.
277 acres, improvements worth \$1,000. Price \$8,000.
200 acres, improvements worth \$3,000. Price \$8,000.
217 acres, improvements worth \$3,000. Price \$12,000.
227 acres, improvements worth \$3,000. Price \$12,000.
227 acres, price \$25,000.
315 acres, price \$25,000.
387 acres, price \$25,000.
300 acres, price \$10,000.
300 acres, price \$10,000.
300 acres, price \$10,000. Crops, stock and everything can be had with farm in a good many cases. Northern Virginia Stock Farms and Country Homes near Washington a Specialty.

Herndon, Fairfax Co., Virginia

P. B. BUELL & SON,

830



"THE SOLE OF STEEL."

This is the title of a little brochure issued by the Steel Shoe Co., Racine, Wis., in the interest of its Steel Shoe, advertised in this issue. Not all of our readers are familiar with this remarkable shoe. To those who are not, we suggest that you refer to the ad and send for the booklet. There are many reasons set forth in it why those who have rough work to do should wear "The Sole of Steel."

RED POLL CATTLE.

Col. Jos. E. Willard, State Corporation Commissioner, is offering some choice Red Polls in this issue. He has taken great pains to get good stock and keep it good. Many of our readers have seen it at the fair. This is a good opportunity to secure something in this popular breed at reasonable prices.

The Manlove automatic gate advertised in this paper is rapidly coming into general use in this State; Albemarle county having more than twenty-five. It is a safe and money making investment as the gate can be returned if not satisfactory and it quickly pays for itself in time actually saved.



1908.]

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ENQUIRERS' COLUMN. All enquiries must reach us by the 15th of the month previous to the issue, or they cannot be answered until the month following.

KEEPING PUMPKINS—SWEET AND IRISH POTATOES.

Will you please tell me how to keep pumpkins, sweet potatoes and Irish potatoes through the winter? F. L. R.

Prince Edward county.

Pumpkins are best kept in a Jry cool, airy shed or barn, where they can be protected from frost. In this issue you will find advice as to keeping Sweet and Irish potatoes in the article "Work for the Month" in the Garden Department.—Ed.

ADVICE AS TO CHANGE OF OC-CUPATION.

I am a young man still in my twenties, unmarried, and am now in the brokerage business. I have been a tobacco farmer all my life up to three years ago, and desire to go back to the farm. I have a hundred acres of thin tobacco land in Pittsylvania county, Va., six miles from railroad. I realize that I must carry more stock than is necessary in that section, in order to increase the fertility of my soil. Would it be better for me to sell and buy nearer to railroad where dairying would be profitable, or could I use my 100 acres to advantage in this way this distance from railroad? Have had no experience farming except tobacco raising. Would it be a good idea for me to spend a month or so on a farm with some up-to-date, progressive farmer before settling? I read the Southern Planter and Practical Farmer with much inter-

Any advice from you will be highly appreciated.

J. S. THOMPSON. New Hanover Co., N. C.

It is always a difficult matter to advise a man whom I do not know in regard to land that I do not know. It is always a risky matter too, for a man to take up a line of work with which he is unfamiliar. There is an impression among the bright tobacco men, and I suppose that in Pittsylvania you grow bright tobacco, that the improvement of the land with peas or clover makes their tobacco of poor quality. I do not believe it, for any one of them will clear a pine thicket for the sake of the humus it has accumulated for tobacco, and I know that the humus made from the decay of peas and clover is better than that from pine trees. But they fail to realize that a crop of legumes has left as much nitrogen in the soil as they would get in a ton of the 3-8-3 fer-

United States College of Veterinary Surgeons



WASHINGTON, D. C.

C. B. ROBINSON, V. S. President. M. PAGE SMITH, D. V. S, Secretary. GEO. A. PREVOST, LL. B., Treasurer

Session 1908-09, begins October 1. The only Veterinary College South of Philadelphia and East of Mississippi. Graduates fitted for Private practice and all Government Positions.

For catalogue and any further information

ADDRESS,

C. BARNWELL ROBINSON,

V. S. Dean. No. 222 C. Street, Northwest, WASHINGTON, D. C.



P. K. DEDERICK'S SONS, 55 Tivoli St., Albany, N.Y.

tilizer many of them use, and they apply just as much fertilizer as ever. I would go to work on that land and practice a good rotation, keep as much stock as I could raise forage for and grow peas for this purpose. But it would probably be better to put a corn crop in between the peas and tobacco to prevent an excess of nitrogen. If I found that growing tobacco forced me to keep the land poor, I would quit tobacco forever, and grow crops that would let me improve the soil. It would be an advantage to you to spend some time on a good dairy farm if you wish to learn dairying, and there is such a farm owned and managed by Mr. Shuford, near Newton, in Catawba county, N. C. Probably one of the best in the South. Dairying is not advisable at a distance from a railroad, but whether you should sell your land and buy elsewhere is a matter I cannot settle for you. Probably it would be better to farm your land and improve it and grow tobacco. But this is a matter that you must settle for yourself.

W. F. MASSEY.

TO PREVENT SKIPPERS.

Will you kindly advise me as to the best way to keep hams and bacon free from skippers?

My meat is properly salted and smoked, and tied in good, heavy cotton sacks, but for all that, after the first year, I find it next to impossible to keep the skippers out. X. Y. Z.

Westmoreland Co., Va.

The hams and bacon should have borax sprinkled on them before being bagged. Dust it all over the flesh side and the skippers will be repelled.—Ed.

VINEGAR MAKING.

What is the surest method to turn apple cider to vinegar in the quickest time? How would you prepare Irish potatoes to keep them from rotting when spread on the floor?

ROBT. M. DANIEL. Prince George Co., Va.

Write to the Director of the Experiment Station, Blacksburg, Va., and ask him to send you the bulletins they have issued on vinegar making.

If Irish potatoes are free from disease when dug and are dry when stored, they need no other preparation to make them keep other than to protect them from frost and water. In this issue in the article "Work for the Month" in the Garden Department, you will find advice on the subject. We have kept hundreds of bushels in the way de-

The George Washington University COLLEGE OF VETERINARY MEDICINE



2113-2115 FOURTEENTH STREET, N. W. WASHINGTON, D. C.

For Catalogue and Information Apply to David E. Buckingham, Dean.



[September,

scribed there up to May or June of the year following. It is very essential to sort out all diseased and damaged tubers before storing, or they will soon cause all the potatoes to rot. If a crop has been struck by the blight before digging, they will not keep. Some people dust them with air slaked lime before storing, but we don't think this necessary.—Ed.

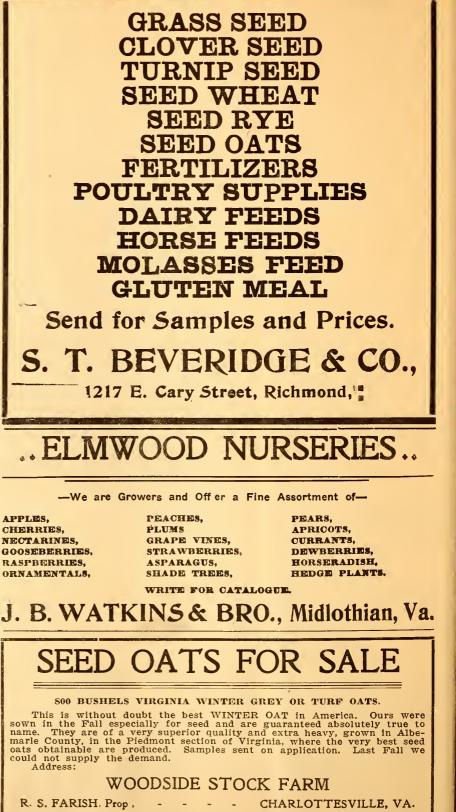
GREEN FALLOW FOR WHEAT. Can you tell me in your September issue what I can sow with my wheat and corn stubble that will produce a crop that I can turn under by middle to last of July of next year, which will give me am-monia and vegetable matter? Will red clover do, sown from 1st to 10th of October? Would vetch answer, or would it damage the wheat crop! You no doubt will advise against turning under green matter at that season of the year, but I will take care of that. I follow a four year rotation, two in wheat and want to turn under a green crop with first years wheat stubble.

H. B. C. GENTRY. Rockingham Co., Va.

Red clover is practically all the crop. The best way to provide to plow down in the July following the harvesting of the wheat, and we doubt very much the profitableness of this, as the crop to be then plowed down will have made but a light growth and will provide but little food for the following wheat crops. The best way to proviae nitrogen and vegetable matter for the crop to follow the wheat, is to prepare the stubble well by plowing deeply and working finely as soon as the wheat is cut and then to apply 250 pounds of Acid Phosphate and sow cowpeas. This will ensure a good growth of peas which should then be cut into the land with a disc or cultivating harrow in September and the wheat be sown without replowing the land. Vetches sown with the wheat would have made most of their growth when the wheat was ready to harvest, and the crop would be harvested with the wheat and there would be little to plow down.-Ed.

ALFALFA GROWING. GRAPES ROTTING. PUMPKINS. BUT-TER MAKING.

I have seen several articles in regard to alfalfa growing, but none quite seem to meet my case. Will you kindly advise me as to the most economical method to follow, as 1 am only renting? There is an acre of land with quite a good bit of alfalfa and red clover on it. Last year the hogs got in it and uprooted it somewhat, but have been able to



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1908.]

835

0-0-0-0-0-0-0 SAVAGE SEEDS 1908 1880 We have in stock the following varieties of new seed such as German or Crimson Clover, Seed Rye, Seed Oats, Old Fashion Clover Seed, Timothy, Herds Grass Seed, Ky. Blue Grass, Orchard Grass. We also handle Grain, Hay, Mill Feed, etc. Write us for prices and samples. We sell the purest and best Seed Grain and Grass Seed grown in this country. Guarantee quality as good and prices as reasonable as any other house in the trade. Write for prices. We are also large buyers of Home-Grown Seed Graia and Grass Seeds Send Samples and we will make you offer delivered at your railroad station. N. R. SAVAGE & SON, :: RICHMOND, VIRGINIA. get two light crops this year. - 1 ESTABLISHED 1850. would like to keep it in alfalfa next 1,200 ACRES. year. How much seed, lime and manure would you advise? RFFS 2. The grapes rotted badly this year. We did not get here in time to trim them. Was that the cause? 3. Would it improve and make the head any larger to take off the two or three larger lower leaves of We are wholesale growers of first class nursery stock of all kinds, Fruit, winter cabbage? Shade, Ornamental Trees, Shrubbery, Hedges, Small Fruits, etc., Asparagus, 4. The pumpkin vines bloom an right, then two or three little green Strawberries, and California Privet in large quantities. worms come in the blossom and it The BEST is the CHEAPEST. Ours is the CHEAPEST because it is the drops off. Is there any preventative? BEST. Handling Dealers' orders a specialty. Catalogue free. tative? 5. What is the cause of mealy or grainy butter? One time it will FRANKLIN DAVIS NURSERY COMPANY. be all right and in two days, will be mealy. The cow gets good grass and plenty of fresh water. 6. What do you consider the best Baltimore, Maryland. way of getting rid of lice from old hens? L. G. BUNDY. Mecklenburg, Co., Va. SMITH SHOCK BINDER. 1. Apply a ton of lime to the acre Far in the lead of all competitors for effective-ness, simplicity, durability, handiness and cheapness. Made of the best Oak, Steel and Manila Rope, and will last for years. ONLY ONE MAN required to ope-rate it, and he alone can bind a shock a minute. Saves binder twine and and your corn shocks will not fall or be blown down, or get wet inside. No farmer can afford to be without this Labor Sav-ing Implement. One day's and harrow it in and let lay for a week and then apply 300 pounds of bone meal per acre and 20 pounds of alfalfa seed per acre and harrow in lightly. 2. The cause of the rotting of the grapes was blight. The only way to ЙB prevent this is to spray with the Bordeaux mixture. In our March issue every year, we give advice as to the spraying of the different fruit crops, as that is the time of the year when this work should be ating Implement. One da use will pay for it. (der the Binder TO-DA One day's tended to. Patented July 16, 1907. 3. No. and if you are not satis-fied, return it, and we will Saves Labor, Twine and Corn. 4. Use Paris Green on the plants refund your money. Sent, express prepaid for \$1.75. Agents wanted. to poison the worms. It can be either dusted on them or be mixed THE SMITH SHOCK BINDER CO., RICHMOND, VA. References: The National State Bank and the Merchants' National Bank. with water and sprayed on them. 5. We 'd on't clearly understand what you mean by mealy or grainy When corresponding with our advertisers always mention Southern Planter.

[September,

butter, and therefore are in a dificulty about advising you. We think the trouble you complain of is probably caused by not churning the cream at the right temperature, or possibly by not properly ripening the cream before churning. We don't think it is the fault of the cow.

6. Dust them with insect powder. Let them have a dust bath in a dry sunny place to which they can resort and they will soon free themselves from mest of them.—Ed.

EXTERMINATION OF FLEAS.

Having seen in your June issue a query from "A Subscriber," from Nottoway county, relative to the extermination of fleas, I would be glad for him to know that fleas will not live on the same place with Muscovy ducks. We were greatly troubled with fleas until a friend told us of this simple remedy, which we have tried with perfect success for two years. We can 'see no reason why it should be so, but the fact remains, and I hope it may prove as beneficial to him as it has been to us.

A. W. C. TRICE.

TIME FOR GRAZING COW PEAS.

The August issue of The Planter just received and read. In Enquirers' column I notice you advise turning hogs on cow peas and soy beans just as the first pods turn yellow. Now, wouldn't there be more feed and just as good to wait until about one-half or more are ripe? Right here I want to ask a question. I have a field of cow peas planted early, about 18th of May, drilled and cultivated three times. The ground was manured before turning. Peas made very heavy growth, vining and forming a mass of vines, but only few peas, and then only around outer edges of patch and ends.

Is this caused from too early planting, or too rich soil; the ground was very light sandy loam. Can it be lack of mineral food? If so what kind? The "black pea" was the one planted.

I also have about one acre soy, or soja bean (is there any difference in soy or soja) that are making an enormous growth, but as yet no signs of bloom. Is it time yet for them to bloom and bear? and do you think they will make as good crop by making such heavy growth?

2. When is best time to apply lime on ground to be sown to Crimson Clover in this month or September? I want to sow in corn after taking fodder off, and also would like to lime land—if it is best to secure stand before sowing. The land I want to sow is in need of lime, and I want to know the best time to apply, before sowing, or after it was up. I would have more time to apply it in winter



time. I want to put land into peanuts next year. What quantity would you advise using? Will I secure a stand by sowing clover seed in chaff in corn after taking all fodder off? Or will it be too late? Will gather about September 1st.

3. Will Hairy Vetch reseed itself if turned under now. Crop of last spring?

4. I want to sow my peanut land to some cover crop for winter; land is light sandy loam, and is in need of vegetable matter. Which is best to sow, Vetch or Rye, or some mixture? Will dig peanuts October, about mid-Please advise which is most dle. profitable to use.

A SUBSCRIBER. Isle of Wight Co., Va.

As to the time to turn hogs to peas. The reason we said "when the first pods are turning yellow is that in that stage of growth the hogs will eat the vines better. When these get dry and hard the hogs tread them down seeking the peas, and thus waste a large part of the feed the crop supplies. The black pea never seeds as freely as the Clay or Whippoorwill or the newer varieties, and especially is this so where there is a very luxuriant growth of vines. The blooms are smothered. The only way to secure a crop of seed is to plant thin in rows and cultivate them, and then the sun and air get to the blooms and perfect them. This was illustrated in your crop where the outside vines carried the pods to maturity. The Soy or Soja bean (Soy is the modern and correct name) will grow until the weather becomes cooler and will then make beans and mature them just before frost.

2. We would sow the Crimson Clover at once, and then after you have plowed the crop down apply the lime and work in as you prepare the land for the peanuts. Use a ton to the acre. You can sow Crimson Clover to the end of September. 3. Yes. Hairy Vetch will reseed it-

self plowed down now.

4. Sow Vetch and a mixture of Wheat, Oats and Rye to make a cover crop upon peanut land. It will be too late to sow Crimson Clover.-Ed.

SASSAFRAS FOR FENCE POSTS. On page 750, of Planter for August, S. R. Hill asks the durability of Sassafras posts. They are slightly more so than green old field pine. I know. In 1866 I had an acre and half fenced with Sassafras posts, hewed square to eight inches-good heart stuff. There was a belief that Sassafras was one of the durables, like Locust, Mulberry, Cedar, etc. They set eight feet apart, and six inch sixteen feet long oak boards nailed to them. In a very few years the fence laid down from end to end. I do not recall the time of year That may have been a factor in cut. their short life.

WM. F. JACKSON. Amelia Co., Va.

Grain must get the nourishment that makes it grow out of the soil -and the more plant food there is in the soil, the quicker and bigger and more plentifully the grain will grow. But you must first put the food into the soil by liberally using rginia-Carolina Fertilizers Then a big bumper crop is assured, because these fertillzers contain the necessary elements required by the soil to properly and fully mature the grain. Farmers invariably find that the more Virginia-1/18/11-Carolina Fertilizer they use, the bigger is the crop, and the greater their profit. Have you gotten the latest Virginia-Carolina Year Book or Almanac, the most useful and valuable book any farmer or grower can read? Get a copy from your fertilizer dealer, or write to our nearest sales office and one will be sent you free. Virginia-Carolina Chemical Co. Richmond, Va. Durham, N. C. Norfolk, Va. Charleston, S. C. Columbia, S. C. Baltimore, Md. Atlanta, Ga. Columbus, Ga. Savannah, Ga. Montgomery, Ala. Memphis, Tenn. Shreveport, La. Ferulizers Virginia-Carolina) Chemical U

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PEAR BLIGHT—WHEAT FERTIL-IZER—PEACH BORERS.

1. Give best treatment known for Pear Blight? Is there any fertilizer you could use on ground around tree that would be beneficial?

2. What analysis of fertilizer will be best to use on low places in field to prevent wheat from falling?

3. At what times during the year should borers be taken from peach trees?

SUBSCRIER. Botetourt Co., Va.

1. Cut out and burn all blighted wood. Then fertilize the trees with Acid Phosphate and Potash spreading a few pounds around each tree not near the trunk but out where the roots are feeding and work this into the ground. Not cultivating the orchard later than May in each year has been also found beneficial as tending to prevent a two rapid growth of new wood. There is no certain remedy for Pear Blight but these two methods of handling the trees have given the best results.

2. A mixture of Acid Phosphate and Potash, say 250 pounds of Acid Phosphate and 50 pounds of Muriate of Potash will tend to strengthen the straw and make it stand up better. It is an excess of Nitrogen in the soil which causes a weak luxuriant growth of straw.

3. Early in the spring is the best time to kill the borers, to prevent laying of eggs by the insect, when they emerge from their holes, but they should be attacked all the year round when they are found to be at work.— Ed.

GRAZING OR FALLOWING COW PEAS-CRIMSON CLOVER.

I have two acres in a very heavy growth of Cow Peas; they were planted last of April and cultivated three times. I want to know best thing to do with them so as to put the ground into early Potatoes in February. I have hogs I wanted to turn in on them, but want my ground get best of it. Which is best, turn under now, or hog them down and turn this fall? Would such ground need as much Nitrogen in a fertilizer for early Potatoes?

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3. What is Crimson Clover seed worth in chaff per pound; no sticks or trash in it, and how much should be sowed to the acre?

A SUBSCRIBER. Isle of Wight Co., Va.

1. With such a heavy growth of Peas as you describe, we would graze with the hogs and then turn down in the fall. The crop used in this way will leave a large residue of fertility in the land, and you need not use Nitrogen so heavily in your potato fertilizer.

2. We do not know what Crimson Clover is worth in the chaff. We have never known it sold in this way,

GROUND PHOSPHATE ROCK.

Manufactured by us analyses 28 to 30 per cent. Phosphoric Acid. and is the most economical form of Phosphoric Acid known. Write the Department of Plant Industry, Washington, D. C., for Farmers' Bulletin, No. 262 and A-52, for information, sent free. For prices and other information, address W. B. ALEXANDER & CO., Mt. Pleasant, Tenn.

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P. B. BUELL & SON HERNDON, FAIRFAX COUNTY, VIRGINIA.

though it is largely used by growers in this condition and makes excellent stands sown at the rate of from three pecks to a bushel to the acre.-Ed.

GROWING FLAX IN VIRGINIA.

Could you advise me through the columns of your valued periodical whether or not flax can be grown in Northern Virginia for its seed to be used as feed, if so should it be sown; how much seed per acre, also what land is best adapted, and whether fertilizer should be sown or not? JAS. W. NICOL,

Loudoun Co., Va.

Yes; flax can be grown in Virginia, though we do not know that it is grown anywhere in the State. We have tried it and know that it will grow here. It should be sowed on land suitable for small grain, like wheat and oats, and requires the soil to be in a good state of fertility, though not necessarily rich. Acid Phosphate and some Nitrogen will help it.-Ed.

VARIETIES OF PEACHES FOR HOME CONSUMPTION.

I should be glad if some of your nurserymen and expert fruit growers would give me a list of peaches for an orchard of one to five thousand treesfor a local market, rather than one at a distance.

I should like to know in what proportion the varieties should be distributed.

Campbell Co., Va.

For a local market you want varieties which will prolong your shipping season as much as possible, and these should be planted in such proportions as would give you your largest supply to come on the market after the Georgia crop has been disposed of. For a very early variety, plant Alex-ander or Greensboro. For early, plant Bishop and Early Crawford. For mid season, plant Elberta, Late Crawford and Stump. For late, plant Bilyen and Solway. The mid season varieties recommended will come in in your section after the Georgia crop has gone to market and with the late varieties will give you a crop to market when your only competitors will be your neighbors in the Piedmont .- Ed.

LAME COLT.

I have a colt about three and onehalf months old which is affected very curiously to me and I would be very glad if you would give me your advice as to how to treat it, and as to what is the matter with it. For about three weeks now he has been dragging his hind feet; seems to double his feet over and drag the hoof and then jerks his leg us as if string-halted. Does not seem to have any trouble any other way.

GEO. J. ROBERTS. Mecklenburg Co., Va. The trouble, no doubt, arises from

CLAUDE G. STEPHENSON. Virginla Properties, Herndon, Va.

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180 acres of excellent blue grass land and most conveniently located; brick and stone buildings and in good shape; well watered and fenced; good orchard. Price \$13,500.

155 acres of the best of blue grass land; fine orchard; well watered and fenced; brick house with hot and cold water and bath; splendid farm build-ings and all in perfect condition; located within four miles of Paeonian Springs where is found the finest school in the County. This is in every way a superior property. Price \$12,400. Easy terms.

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325 acres of fine quality blue grass land; convenient to Round Hill; large brick house; good barn and outbuildings; well watered; fine neighborhood. This would make a magnificent stock farm. The cheapest really good prop-erty in the county. Price \$7,500. One-half cash and the balance in two and three years.

120 acres of good blue grass land; improvements fair; only 4 miles from good town on the R. R. Price \$6,000.

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50 acres near Herndon; fair improvements; fruit and well fenced; conven-iently located. Price \$3,500.

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310 acres of good land with magnificent house and barn and good outbuild-ings; fine fruit; very productive; offered for less than house cost to effect immediate sale.

CLAUDE G. STEPHENSON.

HERNDON, VA.



839

THE SOUTHERN PLANTER

September,

weakness of the tendons, or perhaps from some strain. Rub frequently with a strong stimulating liniment. You will find several of these advertised in The Planter, on page 727 of the August issue.-Ed.

CURING FOX OR COON SKINS. Will you please advise me how to tan out a fox or coon skin? I have a very pretty fox and a coon skin, and I cannot learn from any one how to cure them.

ANDREW SHIPOS, Prince George Co., Va.

Stretch the skin on a board with the hair next the board, and scrape clear of flesh, and then make and apply a strong solution of alum and water and rub with this frequently for a week or two. Then remove from the board and work the skin with the hands until it is soft and pliable.-Ed.

LAME COLT.

Am a reader of your valuable paper and would thank you for a remedy for my colt. Is taking ringbone on one foot. Just can tell the trouble. Is lame, and has been for six weeks. Am blistering it.

W. M. WHITMAN. Loudoun Co., Va.

Blistering and firing are the best remedies to use. Do not hesitate to fire if the blistering is not effective. Firing will often cure when blistering is ineffective .- Ed.

BREED OF CATTLE.

Will you tell me what breed of cattle are marked thus: The cows are of a yellow fawn color, with a white stripe commencing at their withers and extends all the way down their back and tail. The bulls are very back and tail. dark, sometimes black with the same markings.

Caroline Co., Md. J. E. C.

Either Jerseys or Guernseys. The Guernseys are larger than the Jerseys, and the color is not always solid. Faun and white being common.-Ed.

PIGS WITH COUGH.

Wll you tell me what to do with pigs that have a cough: I have a litter of seven born last April and they are very small. I think the cough has kept them from growing.

A. E. ROYALL.

Prince George Co., Va. Give them a little Saltpeter in their slop, say a lump as large as a goodsized pea for each pig, twice a week for a couple of weeks, and then give them the tonic, we gave directions for making in the May issue page 496 .---Ed.

SEEDING GRASS.

I want to sow eighteen acres of grass and alsike during September;



KOGER PEA AND BEAN THRESHER COMPANY,

MORRISTOWN, TENN.

840

1908.]

want to use 300 pounds bone meal and one-half ton ground lime per acre. It applied at same time I suppose lime will drive ammonia from the bone. Would you advise not sowing the lime till toward spring?

W. I. STEERE. Prince William Co., Va.

If you will apply the lime as soon as the land is plowed and harrow it in and let it lay for a few days you can then apply the bone meal without fear of loss of Nitrogen.—Ed.

LAME COLT.

I have a four months' colt which seems to be club footed. He walks on the toes of both front feet, and walks very lame, especially on hard land. Could you suggest anything to do to bring his feet straight?

OLIVER COLEMAN. Halifax Co., Va.

You should have the colt examined by a veterinary surgeon to see if anything else will suffice or be of benefit. operation on the feet to correct the abnormality. It is not likely that anything else will suffice o rbe of benefit. —Ed.

WOOD ASHES—HEN MANURE— FARM-YARD MANURE—PREPA-RATION FOR WHEAT.

Will you please tell me how to manage my wood ashes and hen manure so as to get the greatest benefit from them; would like to make a fertilizer of them that can be run through the grain drill. Please let me know if coarse manure made in barn-yard, without shelter during winter, and not hauled out on the land till August or fall, should be left lying as made or thrown up in ridges, and if it is used on summer fallow for wheat should it be applied before the land is plowed, or after and worked in the land while being prepared for the crop, or used as a top dressing after the grain is up. I follow my corn crop with two crops of wheat, sowing the first crop as soon as I can get the corn out of the way and fallow the following summer for the second crop. How would it do to sow Crimson Clover with first crop to be turned under the following August for the second crop? If you think favorably of it please let me know how much to sow to the acre, also if it should be mixted in with the grain or fertilizer or sown with seed sower. J. E. FRAY.

Madison Co., Va.

Wood ashes should be kept in a dry place and be applied alone. When mixed with other manures containing Nitrogen, like hen manure and barnyard manure, the lime in the ashes causes loss of the Nitrogen. If the ashes and hen manure are mixed together it should only be done just be-

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fore being put into the drill, and even this is not advisable, as the Nitrogen will be largely dissipated before the

crop is ready to benefit by it. Barn-yard manure if it has been trodden down solid in the yard during the winter is better left undisturbed until wanted to be put out on the land. If it has been thrown up loosely into heaps during the winter it is better thrown together into one large heap and packed solid until wanted. We prefer to apply the manure after the land is plowed and work it in during the preparation of the seed bed, or it may be very profitably used as a top dressing during the winter after the grain is up.

Crimson Clover completes its growth by the time the wheat is ripe, and would, therefore, be cut off with the wheat, and there would be only the roots and a little stubble left to bene-The fiet the succeeding wheat crop. clover in the wheat is also objection-able as causing delay in the curing of the crop for the theshing machine. The best way to get the benefit of a legume crop for the following crop of wheat is to plow the first wheat crop stubble as soon as possible after harvesting the wheat and prepare the land well and give it an application of Acid Phosphate, 250 pounds to the acre and sow Cow Peas. This crop should then be cut into the land with a disc or cutaway harrow in the end of September and the wheat be sowed on this preparation without further plowing of the land .- Ed.

DEEP PLOWING-SUBSOILING, &C.

Dr. Crockett of Bedford county, Va., sends us copy of a recent article by Prof. Welborn, of Texas, in which he condemns deep plowing and subsoiling, the use of shredding machines and speaks a good word for scrub stock, and asks our opinion thereon. In the August issue we took occasion to give our opinion as to Mr. Welborns views so far as they related to deep plowing and subsoiling. We refer Dr. Crockett to that issue. He will find our remarks on the first page. On the ques-tion of the value of the "scrub" he is even further off sound teaching than on the other subject. It is to be regretted that such unsound teaching should be promulgated by any one, and especially by a scientific man who ought to know the value of aiming at high ideals. Scratch plowing and scrub stock have to answer for the small yields of crops, the unprofitableness of stock keeping in the South and the low price of our lands. As these are abandoned so will crops increase, stock become profitable and lands enhance in value.-Ed.

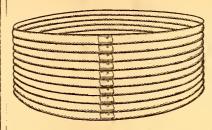
PULLING FODDER-OUT GROWING.

Please tell me the best way to gather corn.

1. Do you think it pays to pull

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OFFER APPEALED TO YOU?



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SECOND HAND MACHINERY

GOOD AS NEW, ONLY USED TWO MONTHS

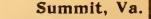
PIERSON BROS.

One 20 H. P., J. I. Case mounted Engine on wheels. One 48 inch Shingle, box board and heading machine. Capacity 20,000 shingles per day. Automatic self-feed, finest on market. Cost \$200.00 will sell for \$200.00 One 30 inch jointer for edging shingles and boards, never been used, cost \$95.00 will sell for \$40.00, most rapid Edger to be had. • ne American, horizontal, self-feed bolting saw. Cuts boards, slats, pickets, handle and spindle stock, railroad ties, splits fencing posts, very desirable for far, ers use, 10 H. P. re-quired to oper te it. Cost \$185.00 will sell for \$110.00. Emerson Automatic Compression Dry Kiln, plans, fixtures and directions for operation. No reasonable offer refused.

No reasonable offer refused.

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blades off corn (that is up to the ear), and then cut the top off above the ear and later put off the corn from the stalk.

2. Would you advise sowing oats in the fall here in this county of Carroll. The oat has been a failure here for two or three years. They are generally sowed about 1st of April. They get thin on the land and die largely and what are left rust ruins when ready to head out. What kind of oats is best to sew.

3. Would you advise getting oats from some Western country to sow here.

J. M. SUTPHIN. Carroll Co., Va.

1. No. Always cut the corn at the root and set up in shocks to cure both fodder and corn together.

2. Yes, if you will sow them in September so that they get good growth before winter sets in. Sow the Virginia Grey winter oat. If you cannot sow in September then wait until March and sow the Burt, the Appler, the Texas Bust proof or the Tartarian.

3. No. Western or Northern seed never does as well as native grown seed.—Ed.

GRAPE GROWING.

Please give some information on the cultivation of the grape in your paper.

SISTER ROSE.

Nelson Co., Ky.

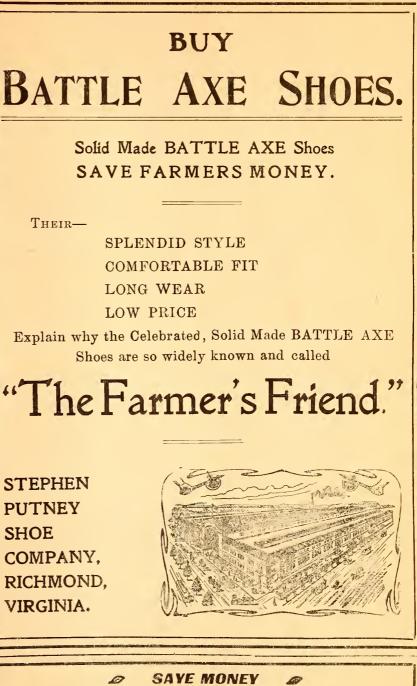
We will bear this request in mind and publish an article or two on the subject during the winter months.— Ed.

POULTRY FARM.

I want to start a little poultry yard here just to get eggs, and want to ask your advice about it. I don't care about raising any chickens. I want about 400 hens to lay. Kindly advise me about how much land would be required for that number of hens, and how many buildings, and what size; also what amount of food would be necessary per day, and what kind of food would be necessary in order to get the best results? Thanking you in advance for your kindness, I am, E. L. CRUMPLER.

Robeson Co., N. C.

In this issue in an article "Poultry Notes" in the Poultry Department. you will find Mr. Husselman's opinion and advice on poultry farms. He has had large experience in the business. In this issue you will also find a report of the result of keeping poultry on an half-acre lot. Our own experience confirms Mr. Husselman's advice. We believe in breaking up a flock into small colonies from 50 to 100 hens in each, and using two smaller yards for each flock rather than one large one.



By writing when in need of any description of

Machinery, Boilers, Engines, Tanks, Cars,

Rail Beams, Channels, Plates, Angles, 'hreaded Pipe sizes (1 to 6 inches.) All sizes iron pipe and shells for road draining, etc Boxes, Shafting, Puleys, Hangers, Cable, Belting, and thousands of other useful articles in the Largest Stock in the South of used

CLARENCE COSBY. 1519-31 East Cary St. RICHMOND, VA. L. D. Phone, No. 3526.

THE SOUTHERN PLANTER

[September,

You might well keep this 400 flock on an acre of land if divided into eight yards, making four flocks of 100 each, and using for each flock two yards alternately. The buldings required are simply weather proof houses, providing, say eight or ten cubic feet of space for each hen to be housed, with scratching sheds adjoining. Feed good sound wheat, oats and corn mixed, and a mash of the meal made from these grains. Feed what the hens will eat up clean every day.-Ed.

SCOTCH KALE. Please tell me the best way to raise

Scotch Kale to winter over. T. J. SELF.

Talbot Co., Md.

The Kale should be sown in August and September in drills two feet six

inches apart. Sow in continuous rows, but do not seed too thickly; six pounds of seed will sow an acre. The largest plants should be cut out first, thus giving the others room to grow, and prolonging the crop season until cabbages come on the market. It is perfectly hardy and will endure nearly a zero temperature. Use a fertilizer having 6 per cent. ammonia, 4 per cent phosphoric acid, and 7 per cent. potash, and apply at the rate of 400 pounds to the acre.-Ed.

SAVING HAY.

To settle a dispute between proprietor and manager, please ask some of your most practical correspondents to decide the following question. After grass, or hay, is dry enough to cock, stack or put in barn, if it is impossible to do any of these before it rains, or before night, is it better for the hay to leave it in the swath or to rake it into windrows, i. e., will rain and dew injure the quality of the hay more in the swath or windrow?

The trouble and expense of drying after it has been windrowed is not in question.

How much more does it cost per ton to put hay in good big cocks than to haul in direct from the windrow? What is the difference in quality?

C. T. BLACK.

Mahoning Co., O.

What say our hay growers on this point? Our own experience is that the hay will suffer less in the windrow than left broadcast, but the windrows should be compact as possible, so as to expose as little of the hay directly to the weather as possible. Another ad-vantage in having it in windrow is that the land around the windrows being clear of hay will dry quickly and the hay when spread out on this dry land will then dry much faster than on land which has been covered with the wet hay.-Ed.

New Kent Co., Va. Feb. 11, 1908. I think the Southern Planter the finest paper published. CHAS. P. CRUMP.



A Child Can Tell Good Paint

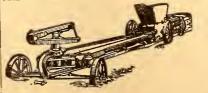
if instructions for using our white lead tester are followed. The whole experiment is very simple and yet it is an absolute guard against throwing away money on worthless paint which looks like the real thing when put on the house, but which will not wear. Painting is a great and constant expense only when the paint material is bought blindly or used without intelligence.

Send for our Test Equipment No. 14

which includes blow-pipe for testing, instructions for using it, and book on paint and painting. Worth dollars to every paint user ; costs nothing but a postal card. Address

FULL WEIGHT KEGS The Dutch Boy Painter on a keg guarantees not only pur-ity but full weight of White Lead. Our packages are not weighed with the contents; each keg contains the amount of White Lead designated on the outside.

NATIONAL LEAD COMPANY in whichever of the foilowing cities is nearest you: New York, Boston, Buffalo, Cincinnati, Chicago, Cleveland, St. Louis, Philadelphia (John T. Lewis & Bros. Co.) Pittsburgh (National Lead & Oil Co.)





LIGHTNING HAY PRESSES

HANSAS CITY HAY PRESS CO. 162 Mill St., Kansas City, Mo.

Davie Co., N. C., Feb. 19, 1908. The Southern Planter is without a doubt the best farm paper published. I would be lost without it. S. B. CRUMP.

Washingon Co., Va., Feb. 26, 1908. I like the Southern Planter very much and find that I cannot do without it as I am running a farm R. T. CRAIG.



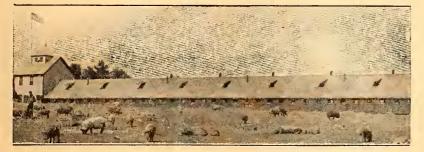
Roof that Really Protects

The more carefully you study the subject of Ready Roofings the more you will be convinced of the great superiority of AMA'TITE. The average buyer sends to a few advertisers for samples, picks out one that looks tough, and sends in his order to the nearest dealer

order to the nearest dealer.

Then again, AMATITE has wonder-

Then again, AMATITE has wonder-ful durability:— First, because it has a mineral sur-face. Doesn't it seem reasonable to believe that a top covering of crushed stone will resist the wear of storms better than a roofing with a smooth or unprotected surface?



ONE OF THE BELLEMEADE FARM BUILDINGS ROOFED WITH AMATITE.

If the dealer doesn't keep the kind selected, some other kind which he has is generally bought instead.

That is a good way to get a leaky roof.

The careful buyer is more partic-ular. He knows that any roofing will last for a little while without atten-tion, but he wants to postpone the time and cost of renewal as long as possible.

He is figuring next year's cost as well as this year's cost. He thinks of the money ne will have to spond after a few years for a new roof if this one won't last any longer. It he can get better roofing at equal cost that will last much longer, he is so much the gainer.

That kind of calculation is called thrift. The thrifty buyer sees import-ant differences between AMATITE and the other roofings.

The other roofings either require a coating with a special liquid every year or two, or periodical painting. Right there is a future expense to be counted by the thrifty buyer. His judgment swings 'owards AMATITE, because it needs no painting either at the time it is laid or afterward. Once it is on you have no further bother -r

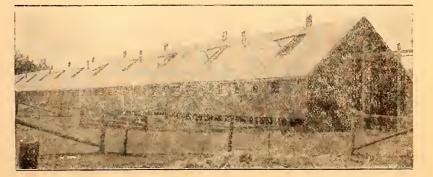
Second, it contains solid layers of Coal Tar Pitch—the naterial which is used by the best engineers for waterproofing deep cellars, tunnels, etc. Doesn't it seem reasonable to suppose that this offers better pro-tection against water than materials which are never used for such severe service?

These, then, are some of the rea-sons why thrifty people buy AMATITE —it costs nothing to maintain, it has remarkable durability, and its first cost is very low. The experience of careful purchas-ers with AMATITE is illustrated by the following letter from Bellemeade Farm:

Farm

BELLEMEADE FARM, Bedford, Mass. March 7, 1905 Gentlemen:—It is now nearly three years since we put your Amatite Roof-ing on our new 300-foot building. This Roofing is now in its third winter and has gone through without a leak, and there is every indication that it will be good for many years. The build-ings with this light, sparkling Roof-ing and the rod crimmings as painted, are very attractive in appearance, and altogether we are much pleased with your Amatite Roofing. We are con-templating the construction of some further buildings for our Shetland ponies, and mean 't use more of your Roofing. Roofing. Yours very truly, S. B. FILIOTT, M. D.

There are more arguments for AMA-TITE than these. Our booklet tells them. Sent with Free Sample for a postal to nearest office. BARRETT MANUFACTURING CO.



AMATITE ON ANOTHER OF THE GREAT BELLEMEADE FARM BUILDINGS AT BEDFORD, MASS.

One more argument. Weight for Boston, St. Louis, Cleveland, Pittsburg, weight, AMATITE is the lowest inCincinnati, New Orleans, Kansas City, price of any mineral surfaced ReadyMinneapolis, London, Eng. Roofing.

Editor, Southern Planter:-

The George Washington University having established a College of Veterinary Medicine, at Washington, D. C., will thus provide a school at the National Capital where young men may pursue the study of veterinary medicine and at the same time broaden their minds by contact with cosmopolitan life and study in the great federal libraries and scientific departments of the government.

No city can approach Washington as a scientific centre and the location for a veterinary school here has many points in its favor.

It is alone a great educating factor. Intending students will find many advantages not found elsewhere.

It is midway between the States and the veterinary student will find here the laboratory and experiment station of the Bureau of Animal Industry, where the highest class of investigations of animal diseases is conducted and which are model institutions unequalled for their purpose in this country.

There is a great scarcity Of trained veterinary practitioners in the Southern States.

Many towns and even small cities of the South have but a single veterinarian where two or three could Small villages in readily thrive. rich farming counties will always support a qualified veterinarian, but seldom is there any one to treat animal diseases except some "handy" man with horses or cows, as the expression goes, and after treating a few cases, this person is called "doctor."

Young men who have good educations will find many desirable locations after graduation and the field is a very wide one.

The amount of capital invested in animals increases yearly in proportion to the size of our population and the veterinarian is the man to assist this industry by suppressing disease among domestic animals. DAVID E. BUCKINGHAM.

Dean.

ROYAL SHOW OF ENGLAND. July 1, 1908.

SHEEP WINNING RECORDS. Total Sheep exhibitors..... 147 Exhibitors using Cooper's Dip. 124 Total Sheep exhibited..... 1124 Total Sheep dipped in Cooper Dip 1023 Premiums awarded ... 268 Premiums won by Cooper dipped sheep 243 Number of breeds exhibited ... 20 Breeds on which Cooper Dip was exclusively used.... 16 Comment is unnecessary.

Figures do not lie

WILLM. COOPER & NEPHEWS Leading Dip Makers for 65 Years. 177 Illinois St.

The Standard for 14 Years.

The oldest prepared roofing on the market, and the first Ruberoid Roofs, laid many years ago, are still giving satisfac-tory service under the severest climatic and atmospheric conditions.

Contains no tar or paper; will not melt or tear. Acid fumes will not injure it.

Outlasts metal or shingles. Any handy man can apply it. There is only one Ruberoid Roofing, and we sell it. You can verify its genuineness by the name on the label and on the under side of every length of Ruberoid Roofing. Send for samples and booklet.

A large stock of Corrugated and V.Crimp Roofing always on hand.

Southern Railway Supply Co., 1323 East Main Street

RICHMOND VA.

You Can Cover Your Roof With Mycoroid Rubber Roofing And Then "Forget It."

Because it requires no coating.

it is absolutely waterproof.

it is practically Fire Proof.

it does not taint water

Write for Samples and Booklet.

We also earry a full line of Galvanized and Painted Corrugated and V Crimp Roofing in rolls and boxes

MCGRAW-YARBROUGH CO., Richmond, Va.

Nelson Co., Va., Mar. 17, 1908. I have been a subscriber to the Chicago, Iil. Southern Planter for a long number

of years and think I been have greatly benefitted by it. HUDSON MARTIN.



REPORTS

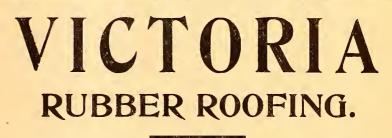
- United States Department of Agriculture, Washington, D. C. Year Book of the Department of Agriculture, 1907. Send to your Senator or Representative for a copy of this book. Every farmer should have it.
 - Farmers' Bulletin 330. Deer farming in the United States.
 - Forest Service. Circular 151. The preservative treatment of loblolly pine cross-arms.
 - Bureau of Plant Industry. Circular No. 3. Some stem tumors or knots on apple and quince trees.
- National Conservation Commission, Washington, D. C., Thomas R. Ship, Secretary. Bulletin 3. Schedule of inquiries.
- Idaho Experiment Station, Moscow, Idaho. Annual report, 1907.
 - Bulletin 62. Dry farming in Idaho. Bulletin 63. Babcock test for butter fat.
- Louisiana Experiment Station, Baton Rouge, La. Bulletin 106. A preliminary report on the so-called cerebro-spinal meningitis of horses. Bulletin 107. Preliminary tests of sugar house machinery.
- Maryland Agricultural College, College Park, Md. The college quarterly. Fertilizer analysis.
- Purdue Experiment Station, Lafayette, Ind. Circular 12. Beef production.

Circular 13. Milk production. South Carolina Experiment Station,

- Clemson College, S. C. Bulletin 137. Hook worm disease of cattle. Bulletin 139. Milk fever. Its prevention and successful treatment. Bulletin 140. Some conditions in-
- fluencing cotton production. Texas Experiment Station, College
- Station, Tex. Bulletin 104. Digestion experiments.
 - Bulletin 105. Notes on forest and ornamental trees.
- Richmond, Va. The Bulletin, May, Virginia Department of Agriculture, 1908. Fourth report on food
- products. Virginia Weather Service, Richmond, Va. Report for July, 1908.
- Virginia State Crop Pest Commission, Blacksburg, Va. Circular. Peach yellows as it affects nurserymen.
- Virginia Department of Health. Health Bulletin No. 1.
- Health Bulletin No. 2.
- Wyoming Experiment Station, Laramie, Wyo. Bulletin 77. Irrigation of Barley. Bulletin 78. Digestion experiments.
- The Philippine Agricultural Review, Vol. 1, No. 4.
- West Indian Bulletin, Barl adoes, W. I. Vol. 14, No. 2.

Albemarle Co., Va., March 1, 1908. I have cut out all other farm papers but the Southern Planter. A. M. TAYLOR.





Waterproof—Weatherproof. Always pliable—never hard or brittle. Any climate, all conditions.

OUR PRICES WILL INTEREST YOU. SEND FOR SAMPLES.

Patented and Galvanized Roofing Sheets, Roll Tin and Tar Paper.



BOOKS.

Agriculture for Southern Schools, by John Frederick Duggan, Director the Alabama Experiment Station, of and Professor of Agriculture in the Alabama Polytechnic Institute. Published by The Macmillan Company, New York. The author states that the principal aims that have guided him in writing the book are these: 1. To arouse the interest of the pupil in nature, and especially in the common plants of the Southern farm, orchard and garden. 2. So to present the subject that it may be mastered rather by stimulated observation and guickened thought than by mere memorizing. 3. To make a teachable book. 4. To make the language simple enough to be readily understood by a pupil in the sixth grade and yet present the subject with enough system and substance to suit the pupils in the high school. 5. To emphasize amply, and illustrate a few principles which when understood and practiced have the power to revolutionize Southern farm practice and to promote the permanent prosperity of the farmer and the State. A somewhat careful perusal of the book convinces us that the author has in a very great degree realized the aims he set out to accomplish. We can most heartily commend the book, and hope that it will find its way into every school in the South and it ought also to be in every farmer's home.

THE DAIRYMEN'S PROGRAM.

Under the direct supervision of Chief Ed. H. Webster of the Dairy Division, there will be held a dairymen's convention at the third annual National Dairy Show, which takes place in Chicago at the Coliseum, December 2 to 10 inclusive. It is the purpose of this convention to deal with subjects of national importance, and the program will be filled with men who will be eminently capable of dealing with subjects of the highest interest to dairy farmers.

No dairyman who can possibly leave his work can afford to miss this convention or miss seeing the large exhibit of dairy machinery and cattle which will be on exhibition at that time. The show comes at a season when the farmers have completed their year's work, and they should make it a point to take a few days for recreation and enjoyment. Not only will they find a trip to the Dairy Show a pleasant one, but it will be the means of giving them an understanding of the scope and magnitude of the dairy industry, as well as a source of much useful information.

Pittsylvania Co., Va., Apl. 2, '08. I find the Southern Planter to be of great help to me in farming and do not see how I could do without it. S. R. HARPER.



1908.]

HENRY C. STUART, Pres.

JOHN STEWART BRYAN, V.-Pres.

M. A. CHAMBERS, Sec.

VIRGINIA STATE FAIR RICHMOND, VA.

October 5-6-7-8-9-10.

6 Big Days of Instruction, Enjoyment and Profit 6

\$35,000. TO BE GIVEN AWAY IN PRIZES. FARMERS OF VIRGINIA COME AND GET YOUR SHARE OF THE MONEY!

Bring out your fines't Horses, Cattle, Sheep, Swine, Ponltry, Grain, Grasses, Fruit, Vegetables, Tobacco, Peanuts, Sorghum, Cow Peas, Soja Beans, Dairy Products, Honey, Etc.

Farmers' Wives and Daughters Are Also Interested.

They should exhibit specimens of their Brend, Butter, Cakes, Jellies, Preserves, Pickles, as well as articles of Fancy Work, the Product of their own deft hands.

ENTRIES CLOSE as follows: For Horses, Cattle, Sheep and Swine, on Monday, September 21st; for Poultry, Domestie Articles, Manufactures, Art and Fancy Work, Wednesday, September 23rd; Farm and Horticultural Products, Plants and Flowers, Friday, September 25th; and Dairy Products, Implements and Machinery, Monday, September 28th. Entries for the races close on Thesday, September 29th, at 10 P M. Records made on and after Sept. 22 no bar. ENTRIES must be made on blank forms furnished by the Fair Association. Consult the Premium List as to the Rules and Regulations.

This is the Gala Occasion of the Year.

Attractions of the Highest Order Have Been Provided. Pawnee Bill's Great Wild West Show,

With 20J Participants—Indians, Cowboys, Soldiers and Plainsmen. Daily Parade on the Grounds

Open Day and Night With Fine Illumination of the Fair Grounds and Track.

GORGEOUS DISPLAY OF PAIN'S FIREWORKS EACH NIGHT AND SPECTACULAR BOM-BARDMENT OF PORT ARTHUR.

Grounds reached by street ears from any point in the eity, and low rates on all the Railroads. Do not forget the Live Stock Sale to take place during the Fair. Send for a Premium List or any information desired to

MARK R. LLOYD, General Manager, Richmond, Va.

(Office of the Fair, No. 819 East Main Street.)

and the second se

RGINIA STATE FAIR

THE SOUTHERN PLANTER

[September,

GOOD HOUSEKEEPING.

Sweetbreads and Mayonnaise.

Clean and parboil one pair of sweetbreads, then throw them into ice water, let them sstand for a half hour or until thoroughly cold and blanched. Take off the fat and skin and cover them with fresh boiling water and a little salt and pepper and let them cook slowly for a half hour. Let them get cold .nen cut into thin slices or dice. Rub the bottom of a bowl with an onion and make in it about half a pint of mayonnaise. Line a bowl with lettuce leaves and mix the sweetbreads with the mayonnaise and put the mixture in the dish. Set on ice until ready for use.

Saratoga Chips.

Peel the Irish potatoes and shave them in the very thinest slices possible, drop the slices into ice water for a short time, then take them out and dry on a cloth. Have your lard boiling hot in a deep pan, drop the slices of potatoes in, a few at a time. When they are cooked to a very light brown strain them out of the fat and spread on a wire mat. Sprinkle salt over them and so on till the dish is full. Serve cold for tea.

Baked Tomatoes forBreakfast.

Select sound, well ripened tomatoes. Put them in a deep bowl with a small quantity of water. Sprinkle over the top of each bread crumbs, seasoned with pepper, salt, celery seed and butter. Place in the stove and bake until the tomato is well done.

Peach Preserves.

Peaches Tipe but not soft should be selected for preservs. Peel them carefully and cut in as large pieces as possible. Weigh them and allow three quarters of a pound of sugar for each pound of fruit. Put the sugar in a kettle with one cup of water for each three pounds of sugar. Let it melt and boil up. Then put the peaches in and let them come to a boil and boil about five minutes, then take the kettle off and let the fruit in it stand till the next morning. Then you must boil it five minutes then take out the peaches and let the syrup boil a half hour, re turn the peaches to the syrup and boil five minutes more, and remove thm again to the dishes and continue to boil the syrup. When the peaches are cool they may go back into the kettle and stay on for a few minutes then set them away in the kettle again and the next day heat to boiling point and put into your glass jars and seal up at once. This receipt is to be used when you want your preserves to stay in whole clear

I.C. GIA Are solving the hired help problem for hundreds of farmers. Vertical Engines made in 2 and 3-Horse Power.

Horizontal Engines (Portable and Stationary) made in 4, 6, 8, 10, 12, 15 and 20-Horse Power. Air Cooled Engines, 1-Horse Power.

Traction Engines, 10, 12, 15 and 20-Horse Power. Also sawing, spraying and pumping outfits.

OU offer high wages, and still find it difficult to get hired men. Why not do as other progress-

ive farmers are doing—let one of the dependable and ever ready I. H. C. gasoline engines be your hired man?

Suppose you want to grind feed, shell corn, shred fodder, pump water, operate the churn, grindstone, fanning wood. With an I. H. C. engine you will need no extra help. You can run the engine and attend to the machine vourself.

In the same way you will be able to do dozens of farm jobs which usually require the labor of two men. You will be surprised to find how little attention an I. H. C. engine requires.

The engine will work for you indoors

or out, in wet or dry, hot or cold weather. You will have no difficulty in operating or controlling it. Only a few cents per hour is re-quired for fuel. All I. H. C. engines

use either gas, gasoline or denatured alcohol.

Please notice in the above list of styles and sizes that there is an I. H. C. gasoline engine adapted to practically every farm requirement.

You can have a small engine which you can easily move from place to place, as your work requires, or you can have a larger engine forstationary use. The efficiency of all I. H. C. engines is well known. You can not possibly have any better guarantee of a dependencie operative there are of these optimes dependable engine than one of these engines

affords. Call on the International local agent for Write catalogs, and inspect these engines. Write for colored hanger and booklet on "Develop-ment of Power."

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GASOLINE ENGINES WINDMILLS AND TANKS PUMPS AND RAMS SAW MILLS AND SAWS **IRON AND WIRE FENCE** ARTESIAN WELL DRILLERS Water Supply and Plumbing Systems Installed. No Charge For Information SYDNOR PUMP & WELL CO., Inc., Dept., B. Richmond, Va.

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THE SOUTHERN PLANTER

pieces. When it does not matter you can be less careful.

Apple Jelly.

Very sour apples are the best for jelly. Wash them and cut them up without removing the skins or the cores. Put them into a kettle with nearly enough water to cover them and let them boil until the fruit is a mass of pulp. Pour it all into a bag and hang it up to dry till the next day. Measure the juice and weigh a pound of sugar for each pint of juice. Put the sugar into pans and set it inside the stove. Put the juice on the stove, when it comes to a boil add the hot sugar and let it boil hard for about twenty minutes. You will have to use your judgment about the time you cook jelly, some-times it takes longer than twenty minutes, then again not so long. Honey and Peaches.

Peel medium sized peaches, the plum peaches, thoroughly ripe are the best, pack them evenly into quart jars and fill the jars to the top with clear, strained honey. Seal the jars and put them away for three months and you will be delighted with the results.

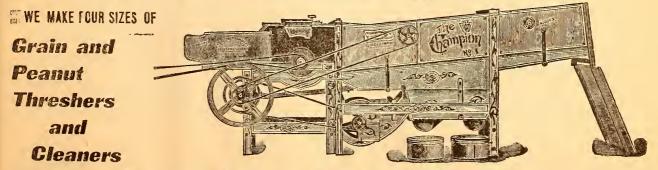
Brandy Peaches.

Use plum peaches for these too. Weigh ten pounds of peaches and four pounds of white sugar. Make a syrup of the sugar and three cups of water; let it boil and add the peaches a few at a time until all are cooked through, but not soft. Let them cool on dishes and boil the syrup until thick. Pack the fruit in jars and add one cup of the syrup, add two cups of good brandy, mix well and pour over the fruit in the jars and seal up at once.

This is said to be good. Squeeze

PERFECK IN CONSTRUCTION EVERLASTING IN DAILY USE Send for handsome new catalogue illustrating and describing the new and improved machine in detail, to be had for the asking. THE DE LAVAL SEPARATOR CO. RANDOLPH & CANAL STS. CHICAGO 173-177 WILLIAM STREET General Offices: MONTREAL 1213 & 1215 FILBERT ST. PHILADELPHIA 14 & 16 PRINCESS STREET WINNIPEG 74 CORTLANDT STREET. 107 FIRST STREET PORTLAND, OREG. DRUMM & SACRAMENTO STS. SAN FRANCISCO NEW YORK. Tomato Wine.

Ellis Champion Grain, Peanut and Cow Pea Thresher, MANUFACTURED BY Ellis Keystone Agricultural Works, Pottstown, Pa.



NOS. 1, 2, 3, and 4, FOR EITHER STEAM, LEVER OR TREAD POWER,

All of which are guaranteed to give entire satisfaction. Our THRESHERS and CLEANERS have been thor-oughly tested throughout the United States, and pronounced by the growers of GRAIN, PEANUTS, BLACK and COW PEAS as the most complete and satisfactory Threshers of the period. No grower of any of the above can afford to be without one.

For Catalog and any information desired write to

GEORGE C. BURGESS, General Southern agent, Box 182, Petersburg, Va.



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First—Always Best—Cheapest

The World's Standard

Ten years ahead of all others in every feature

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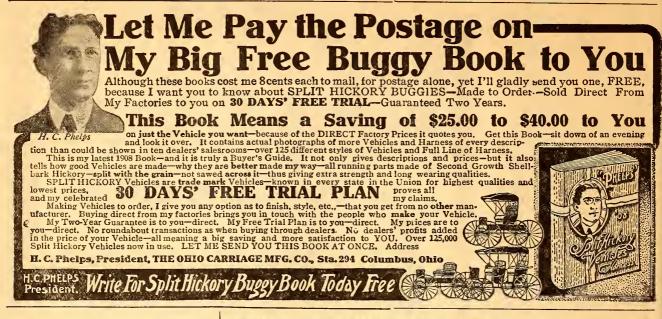
BEAUTIFUL IN DESIGN

IAVA

851

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[September,



the juice from ripe tomatoes and put one quart into a gallon bucket. Add three pounds of sugar, then fill the bucket up to the gallon mark with cold water and set it aside. Skim every day for three days, or until it ceases to ferment. Put it into a jug and do not cork tightly Put it for three weeks.

Peach Pickle.

Peel the peaches and weigh them. Allow one-third of a pound of brown sugar to each pound of peaches. Sprinkle the sugar over the fruit and let them stand all night. The next day add mace, clove, and cinna-mon, and a small quantity of gin-To each peck of the peeled ger. peaches add one quart of good vinegar and boil until they are clear.

Preserved Apples.

If the apples are very ripe they may be made to hold together by throwing them for half an hour into a bucket of water to which you have added two tablespoons of lime water. Weigh the apples and allow three quarters of a pound of sugar to each pound of apples. Add a very little water to the sugar and make a syrup. Drop the apples in when it boils and let them simmer slowly until they are clear. You may make a variety by seasoning some of them with ginger, and some with lemon, and turn a can of pineapple into the rest.

A NEAR-SIGHTED ANSWER.

Some funny things happen in the school-room. A Brooklyn teacher called upon a small boy to define "multitude."

"A multitude," said the boy, "is what we get when we multiply."-August Lippincott's.



Log Bean 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 lumbr 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 Suppl Company, New Berne and Wilmington, N. C.; Gibbes Machinery Company, Columbia, S. C.

CLARK'S SAMPSON TOBACCO PRESS AND JACKS.

Every tobacco grower should have one or more of these presses. Save money by using this press; make money pressing for others. The platform of this press is $3\frac{1}{2}$ feet wide and 4 feet long. The height in the clear is 4 feet. The press or jack stand is on top of the beam overhead. This is a very powerful press. Many Hundredsof them are now in use in the tobacco

Sections We sometimes make them much larger for special

We sometimes make them much a work. It is used for pressing in bar-rels, hogheads and cases, fruit, to-bacco, dry goods, also for tank scrap. etc. It weighs about 560 lbs. The wood work is made of the best hard maple, ash or oak. The iron work is constructed of the best mal-leable iron and steel, strongy bolted together. Write to-day for FREE BOOKLET and Special Prices.

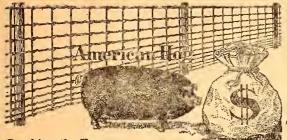


CUTAWAY HARROW CO, 861 Main St., HIGGANUM, CONN.

TIME, MONEY and MONEY-SAVING IMPLMENTS.

SEND FOR OUR NEW CATALOGUE DESCRIBING THEM.

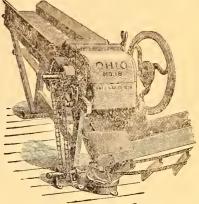
'American Fence

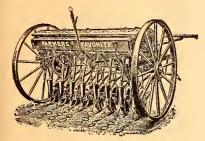


Combine the Fence and the Hog and get the Dollars American Dollars

Buckeye Corn Harvester will cut two rows of corn at a time; will do the work faster and easier and at a great saving over other methods. The cost of this machine can be saved in cutting 20 acres and the corn stands in shocks much better than when cut by hand.

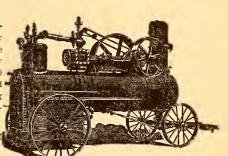
Ohio Feed and Ensilage Cutters for hand or power. Furnished with or without Carrier or Blower. Special Catalogue telling all about them sent free to any address.





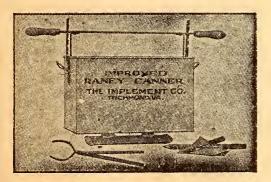
Bickford & Huffman Farmer's Favorite Grain Drills are built to wear, to sow accurately and to satisfy every user. The Fertilizer Distributor handles accurately any quantity of fertilizer from 55 to 960 lbs. to the acre. Each drill is furnished with special gear wheels for planting corn and beans in rows any desired distance.

Ajax Center Crank Steam Engines. sizes from four to fifty horse power.



Peerless Gasoline Engines, 2 to 12 horsepower. simple, durable and economical. Easy to start and will develop their full rated horse power.

THE RANEY CANNING OUTFIT.



Will save your fruit and vegetables; costs little; keeps money on the farm and brings more on. We furnish them to work on cook stove or furnace for either home or market canning. Their small cost will be saved in one day. Send for circulars and prices. With each outfit we furnish free a book of instructions, telling how to can all kinds of fruits and vegetables. Prices from \$5 to \$30. All sizes of tin cans at the lowest market price.

Our descriptive Catalogue gives full description and price of Farm Implements, Wagons, Buggies, Fencing, Barb Wire, V-Crimp Metal and other Rofings, Engines, Saw-Mills, Threshers, &c., mailed free on request.

THE IMPLEMENT COMPANY, 1302 East Main Street, - - Richmond, Va.

[September,

CLUBBING LIST

In this list will be found prices on papers, magazines and periodicals which are most called for by our We have club rates with readers. nearry all reputable publications, and will quote them on request. DAILIES.

ALONE S. P.

WITH

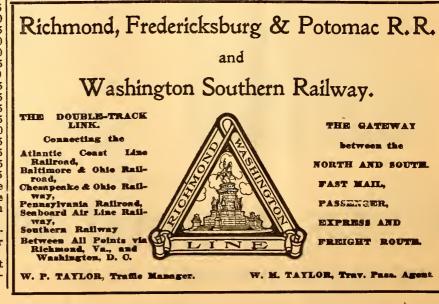
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Times-Dispatch, Richmond,				
Va	66	00	\$6	00
Va. Times-Dispatch (without				
Sunday)	4	00	4	00
News-Leader, Richmond,				
Va	8	00	3	00
The Doct Weshington		~~		00
The Post, Washington D. C		~~		
D. C	6	00	6	00
The Sun, Baltimore, Md	3	00	3	40
THRICE A WEEL	ĸ.			
The World, New York	1	00	1	25
	-	••	1	20
WEEKLIES.				
Times-Dispatch, Richmond,				
Va	1	00	1	25
Southern Churchman, Rich-				
mond, Va	2	00	2	25
Central Prochytorian Rich.			-	
mond, Va	2	00	2	25
Honor's Woold's	4	00	4	
Harpers weekly	4			
Breeders' Gazette		00	1	50
Country Gentleman	1	50	1	75
National Stockman and				
Farmer	1	00	1	00
Hoard's Dairyman	1	00	1	30
Memphis News-Scimitar	_	50		75
		00		
SEMI-MONTHLY				
Kimball's Dairy Farmer	1	00		75
MONTHLIES.				
The Century	4	00	4	25
St. Nicholas	3	00	3	25
Lippincott's	2	50	2	50
Harper's Magazine	4	00	4	
Delineator	î	00	î	40
Harper's Bazaar	_	00	1	40
Scribner's	1			
Scribner's				
	3	00	3	25
American	1	00	1	35
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American Cosmopolitan Everybody's	1	00	1	35
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When two or more publications are wanted, the price for them can be found by deducting 50 cents from "price with Southern PLANTER."

We cannot, under any circumstances, furnish sample copies of other publications.

We will cheerfully quote our best price on any line of publications submitted to us.

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855

HOW HE EXPLAINED.

The dissatisfied voter out of his regular party had .tried something else at the previous election. When he appeared to register for the next primary there was some hitcn in the proceedings.

"Didn't you vote the prohibition ticket last time?" inquired the clerk. "Yes," responded the voter, un-

abashed.

"How do you explain that?"

"Well, you see," he explained, with charming frankness, "I was drunk at the time and didn't know what I was doing."

The clerk accepted the explanation as quite satisfactory and took him back into the fold again.

-Sepember Lippincott's.

CURES SPAVINS, ETC.

St. Amedes, P. Que., Nov. 26th. Dr. B. J. Kendall Co.,

Enosburg Falls, Vt. Gentlemen:

Please send me your valuable treatise on the horse and his discases. I have used your spavin cure with success and find it an excellent remedy for spavins and other diseases.

> Yours respectfully, HENRY RILEY.

AUCTION SALE.



Alamance Stock Farm, Graham, N. C., will offer at public auction, on

THURSDAY, SEPT., 3, 1908.

at 11:30 A. M., about 85 head of choice Shetland Ponies, many of which are the finest specimens to be seen on the place. The offerings include ten fine brood mares, with foals at their sides; 35 brood mares, bred to good sires; 25 yearling and 2-year-old fillies; several stallions and a lot of geldings fit for use. Many of these ponies are as fine as can be had, and would not be sold at any reasonable price but for the continued ill health of Mr. L. Banks Holt, the owner, which renders it necessary to reduce the stud at Alamance Farm. For further particulars address.

McBride Holt, GRAHAM, N.C.

P. S.—Alamance Farm is on the line of Southern Railway, between Greensboro and Raleigh.

Loudoun Co., Va., Feb. 26, 1908. I always look forward to the arrival of the Southern Planter with a good deal of interest, and I spend many hours from time to time in reading the articles therein

CHAS. MOTT.

Campbell Co., Va., Feb. 24, 1908.

Please continue the Southern Planter to my address. If there is in this country a farm paper superior to yours, I have never seen it.

THOS. FAUNTLEROY.

CURES RINGBONE.

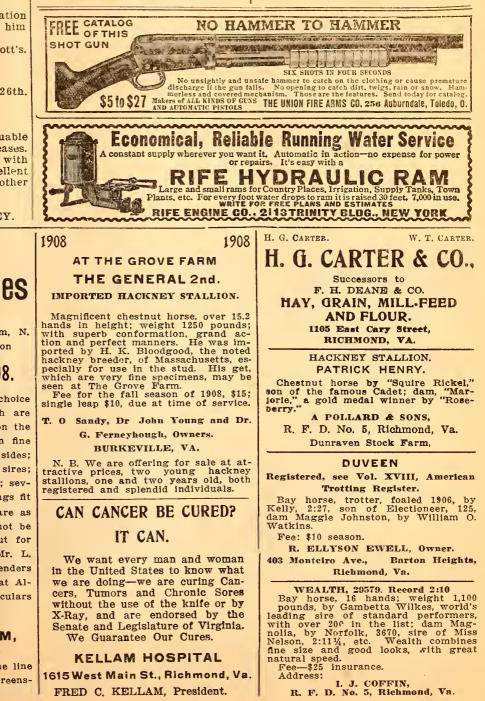
Tamworth, N. H.fi April 1, 1908. Dr. B. J. Kendall Co.,

Enosburg Falls, Vt.

Gentlemen:

I have given your Kendall's Spavin Cure a trial on a horse for ringbone, with the best results, less than two bottles effecting a cure. 1 find it will do what you claim if it is used as directed.

> Yours very truly, MRS. CLARA M. MOODY.



SALLY'S QUESTION.

The worthy Sunday-school superintendent of a certain Maryland town is also the village dry goods merchant. He is as energetic and efficient in his religious as in his secular capacity. An amusing incident is told of his attempt to enlarge the scriptural knowledge of a class of little girls.

He had told most eloquently the lesson of the day, and at the conclusion he looked about the room and inquired encouragingly:

"Now, has any one a question to ask?"

Slowly and timidly one little girl raised her hand.

"What is the question, Sally? Don't be afraid. Speak out."

The little girl fidgeted in her seat, twisted her fingers nervously, cast her eyes down; finally, in a desperate outburst, she put the question:

"Mr. Ward, how much are those gloves for girls in your window?"--August Lippincott's.

Franklin Co., Va., Mar. 6, 1908.

I like the Southern Planter very much. If we could get all the farmers to take it and follow its instructions this old State would bloom as a rose.

B. C. DILLON.

A LOVERS' QUARREL.

Two young persons of Germantown had been engaged, had quarreled, but were too proud to "make up." Furthermore, both were anxious to have it believed they had entirely forgotten each other.

One day the young man called, ostensibly on business with her father, on which occasion it chanced that she should answer the door-bell.

The young man was game. "Pardon me," he said, with the politest of bows, "Miss Eaton, I believe. Is your father in?"

"I am sorry to say he is not," the young woman responded, without the slightest sign of recognition. "Do you wish to see him personally?

"Yes," replied the young man, as he turned to go down the steps.

"I beg your pardon," called out the young woman, as he reached the lowest step, "but who shall I say called?"

THE REASON.

"Why doesn't Smith call in his family physician? Has he lost confidence in him?"

"No, the doctor has lost confidence in Smith!"-August Lippincott's.

McDowell Co., N. C., Feb. 17, 1908. The Southern Planter has been a great help and pleasure to me. MRS. D. A. BROWN.

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Scotch Kale 844 Saving Hay



You will not suffer from wet, sore, blistered, aching, feverish feet, or run the risk of colds or rheuma-tism if you wear steel Shoes. For these steel-bottomed shoes, with their waterproof leather uppers, are so easy on the feet that it is a positive pleasure to wear them. They do not heat and sweat the feet, like rubber boots. Neither 10 they become water-soaked and warped out of shape, as leather shoes do. They are light in weight, yet so strong and durable that they will outwear from three to six pairs of the best all-leather shoes. In fact, they actually save at least \$5 to \$10 of your shoe money every year, besides saving sickness and doctors' bills.

They Save Doctors' Bills Your Money Back if Not O.K.

Wear Steel Shoes and you can work in wet ground without fear of colds, rheumatism, stiffness or other diseases caused by wet or cold feet. They keep your feet always dry and warm in any kind of weather. The thick, spring Hair Cushions or Insoles inside the shoe absorb all perspiration and odors. You can easily take out, clean and dry the Hair Cushion each night. This Cushion prevents the jars of walking, and keeps corns and callouses from forming. Not only will Steel Shoes give greater foot comfort than you have ever known before, but they will pay for them-selves over and over again in the saving of medicine and doctors' bills.

Unreaper inan All-Leather Shoes Our \$2:50 Steel Shoes, with uppers 6 inches high are better than the best \$3:50 all-leather shoes. Our \$3:50 Steel Shoes, with uppers 9 inches high are worth more than the best all-leather shoes you can buy at any price. One pair of steel Shoes will outwear from three to six pairs of all-eather shoes. Steel Shoes need no breaking in the shoe is worn. The leather uppers do not be-shoes made, regardless of first cost, for one pair state shoels rear and you never spend a cent for "half soles" and repairing heels. Cheaper Than All-Leather Shoes | Our Full-Year Guarantee Here is why

TEEL SHOE COMPANY, Department 39, RACINE, WISCONSIN

You are perfectly safe in sending to us for a pair of Steel Shoes, as we agree to refund your money promptly and freely if you are not satisfied when you see the shoes. Money cannot buy better working shoes than either the \$2.50 or \$3.50 style. You get more foot comfort and health protection, longer wear and greater satisfication in a pair of Steel Shoes than money can buy elsewhere. We strongly recommend the \$3.50 pair, because the 9-inch faction. Send \$3.50 for 9-inch. Steel Shoes, state size yon wear, and we will ship you without delay the best and most comfortable working shoes you ever wore. For convenience, fill in, clip out and mail the coupon.

Order Blank for Steel Shoes 1 Steel Shoe Co., Dept. 39, Racine, Wis.

Gentlemen:-	-I enclose	e		fo r
\$in	payment	for	pair Steel	Shoes,
size				
Name				
Town			State	
	\$in size Name	\$in payment size Name	Name	in payment for pair Steel size, Name

[September,

and

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FREE !

Send for our booklet."The Sole of Steel" 00000000 -or betterstill, send for a pair of Steel Shoes. See our Money-Back and **Guarantee Offer below.**

1908.]

The "New-Way" Gasoline Engine.

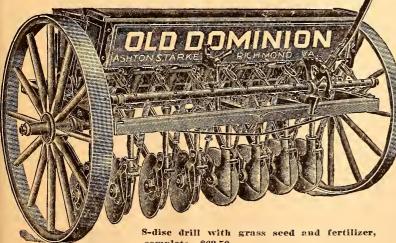
Simple - Strong - Light - Reliable COOLED BY AIR.

No Cylinders to Crack From Freezing. Dust Proof. All bearings and cogs inclosed and run in oil . Buy the New-Way, the Air Cooled Engine. Designed especially for the farmer.

Write for Prices and Catalogue.

Stockdell-Myers Hardware Co.. Distributing Agents For Virginia and North Carolina. PETERSBURG, VA.

The Latest Improved and the Best Wheat, Etc., Drill.



complete, \$62.50.

We acknowledge it is the "Superior Fertilizer" hopper and the "Farmers' Favorite" grain hopper combined into a wheat drill.

Why is our price low? It costs as much to manufacture our drill but you don't have to pay agent's commissions and traveling men's expenses. That's Why.

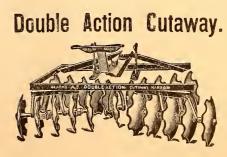
Ashton Starke, Richmond, Va.

THE **DOUBLE ACTION HARROW**

has revolutionized the use of harrows. There is nothing that approaches its work.

No farmer can afford not to use it. It will pay to break up any harrow you have and get one of these.

If you want the names of farmers using these tools, write us.



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FARMERS' NATIONAL CONGRESS. TWENTY-EIGHTH ANNUAL SES-SION TO BE HELD AT MADISON, WIS., SEPTEMBER 24-30, 1908.

PRELIMINARY PROGRAM AND AN-NOUNCEMENT.

The 28th annual session of the Farmers' National Congress will open in Madison, Wis., September 24, at 11 A. M. with prayer by Right Rev. John Hazen White, Bishop of Northern Indiana. Welcoming addresses will be delivered by Gov. Davidson, of Wisconsin, and Mayor Schubert, of Madison. There will be responses by Vice President Joshua Strange, of Indiana, and others.

The meeting will be held in the auditorium of Agricultural Hall. Hon. W. D. Hoard, chairman of the board of regents of the University, C. R. Van Hise, President of the University, Hise, President of the University, Dean H. L. Russell, Prof. W. A. Henry, Dr. S. M. Babcock, and others who have helped in the agricultural upbuilding of the State and nation, will be present and assist in making the meeting entertaining and instructive. (Lake Wingra Park car which stops at College avenue within one block of agricultural hall.)

WISCONSIN AGRICULTURAL COL-LEGE.

The session will be held in a city where is located one of the leading agricultural colleges of the country,

and connected with which are many agricultural leaders of even international reputation. The opportunity to visit and study this college, and to meet the distinguished gentlemen connected with it will be an unusual privilege. The following gentlemen connected with the college have consented to deliver addresses during the session: Hon. W. D. Hoard, influence of the Babcock test; Dr. W. R. Russell, bovine tuberculosis, with post mortem demonstrations; Prof. A. R. Moore, grain breeding; Prof. Whitson, soil drainage; Dr. A. H. Alexander, illustrated lecture on horses. The subject of tuberculosis is one

of the most important before the country to-day, and Dr. Russell's talk will be one of the most valuable feautres of the Congress. He will give full information, that can be absolutely relied upon, as to the tuberculin test and its application. Prof. Geo. C. Humphrey will conduct a demonstration at the dairy barn pavilion on the different types and breeds of cattle.

PROMINENT SPEAKERS.

Among others who have signified an intention to be present and address the Congress are: Hon. R. G. Glenn, governor of North Carolina; Hon. Albert B. Cummings, governor of Iowa; Hon. J. A. Johnson, governor of Minnesota; Hon. James Sheakley, of Pennsylvania, ex-governor of Alaska; Hon. Harvie Jordan, of Georgia, ex-president of the Farmers' National Congress and president of the Southern Cotton Growers' Association; Col. Robert E. Lee, Jr., of Virginia; M. R. Myers, of Chicago, (on Farmers' Co-operative Enterprises); Hon. J. J. Hill, of St. Paul, Minn.; Hon. W. W. Kitchen, of North Carolina, (Relation of Government to Agriculture); Dr. Geo. T. Winston, president of the North Carolina A. and M. College, Raleigh, (The Purchasing Power of Agricultural Products); Dr. Isham Randolph, chief engineer of the Chicago Canal and consulting engineer of the Panama canal. What the United States reclamation service is doing for American agriculture will also be explained in an illustrated address.

A PRINCETON STUDENT'S WIT.

An ingenious and amusing answer was recently given by a student in the natural philosophy class at Princeton University.

An instructor gave the question: "Define transparent, translucent, and apaque."

"I cannot, professor," answered the student, "precisely define these terms, but I can indicate their meaning in this way: the windows of this room were once transparent, they are now translucent, and if not cleaned very soon, they will be opaque."-August Lippincott's.

The One Simple Engine.

the one engine that is really steady. The reason is that it has but 1-3 the The reason is that it has but 1-3 the parts. There are but 4 moving parts to its valve action. All others have 12 and more. That's why they're balky and hard to understand. You can't take proper care of such engines. That's

why you need ours. We have the largest and costliest gas engine factory in the United States. We made and sold last year nearly 3,000 McVickers.

None but the best engine could build up a business like that. Our patents are the most marvelous on record in Washington. The reason

on record in Washington. The reason is this: They do away with all cams, gears, ratchet wheels, tumbling rods, eccen-trics, etc.—things you know nothing about, perhaps. If you're not familiar with these things, there's all the more reason why you don't want them in any engine you buy. For you want to run your engine yourself. You don't want an enginger

You don't want an engineer. And these are the "jim cracks" that cause most of the trouble and most of the need for repairs. There are over 500 gasoline engines

There are over 500 gasoline engines to choose from. 499 are practically the same—they must employ these troublesome parts in order to run at all. There is but one which is simple— one which is minus these parts. That's the McVicker.

DECIDE WHICH IS BEST

All engines are claimed to be simple.

For simplicity is of vital importance. And all makers know this. But some dealers will tell you that our engine is too simple. They hope in this way to keep you away from comparison. They have no argument with which to off-set our claims. That is their substitut

set our claims. That is their substi-tute. We invite comparison. For that will prove all our claims. Compare the McVicker with any engine you know. You can in this way decide absolutely which is the best farm engine made in the country to-day. For when you have compared the McVicker with one, you have compared it with all, for all others are nearly exactly alike. We suggest that you get demonstra-tions and notice the action of each. For that will tell you more in ten minutes than two hours' of talking. Let the McVicker sell itself to you-after you've seen the others. We prefer that you first see the oth-ers, for then our engine's advantages will completely convince you. Write us to-day for the catalog that tells of the many advantages of

The McVicker,

-how it develops one-sixth more power -how it develops one-sixth more power and uses less fuel and oil-how it stands 50 per cent. more sudden over-load than any other engine. One of our 3 1-2 h. p. engines pumps 35,000 gallons for Chas. Bunn, of Ithaca, Mich., in 24 hours without a bit of at-tention and on 2 gallons of fuel. Think what it is to have the engine

with but 57 parts, counting even the nuts and screws. The next simplest engine

to ours that we know has more than 180 parts. That's why the McVicker is strongest --why it stands more wear and tear.

POWER-HOUSE PLANS FREE.

We send you free with the catalog plans for a model farm power-house. Also a book full of letters telling what users think of our engine. We make all sizes from 2 to 30 h. p., mounted all ways for all uses. Also traction engines. The McVicker twice doubles the value of any labor-saving machine that you own.

Don't decide on an engine until you get full information and learn the name of the dealer near you who will de-monstrate for you. Compare the Mc-Vicker with others—and let the best Wicker with others—and let the best be your choice. Write a postal to-day—now, before you forget. Address

ALMA MFG CO.





September,

1908.]





THE SOUTHERN PLANTER

HEADS OF FAMILIES AT THE FIRST CENSUS, 1790.

860

About a year ago your attention was called to the fact that Congress had authorized the Director of the Census to publish, during the fiscal year 1907, the names of heads of families with related data secured upon the schedules of the first Census of the United States, 1790, and that under that authority the Director of the Census announced the publication of the returns for three States, New Hampshire, Vermont, and Maryland, the resources of the Bureau not being sufficient to complete these publications.

During the session of Congress just closed, authority was granted the Director of the Census to continue the publication of the returns ofr the remaining States for which records are in existence during the present fiscal year. Accordingly, the returns for Maine, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, North Carolina, and South Carolina have been compiled and are now in press.

I addition to the above, the State records for Virginia for 1782 to 1785 have bee nobtained from the State government and will be ussed in lieu of Census returns.

As in the case of the previous issues, each State will be published separately as a part, or volume, consisting of from -00 to 300 pages, handsomely

printed upon antique paper, sewed and bound with turned handsome cov-Each part will be fully indexed, ers. and will contain as a frontispiece a map of the State represented, 11 by 17 inches in size, reproduced by lithography from an atlas published in 1796.

In accordance with the law, these pamphlets are offered for sale by the Director of the Census at the uniform price of \$1 for each part. A limited number of sets will be bound up, so that all parts will appear in uniform cloth binding of a substantial character, making approximately four vol-umes. No extra charge will be made for the cloth binding in such cases.

As your State is one of the original States enumerated in 1790 for which the returns are being published, as above explained, desire to ask your co-operation in making known the publication of thes important historical records, since the patronage will, of course, come principally from per-sons residing in the States for which the returns are printed, or from resienumeration. Inclosed herewith you dents of other States who are the descendants of persons included in the will find sample pages presenting certain historical and explanatory matter.

Very respectfully. S. N. D. NORTH, Director of the Census. Bureau of the Census, Washington, D. C., July 1, 1908.

FOOS

THE ARCHBISHOP AND THE BULLS.

At the time Archbishop Ryan was selected for the position which he now occupies with so much distinction, there was some difficulty concerning the official announcement of his ap-Three or four weeks pointment. elapsed, and still the Papal Bull had not reached him. One of his friends, who was deeply concerned in the document, said to him with deep solicitude:

"Your Grace, what do you suppose has become of your Bulls?"

"I don't know," was the smiling rejoinder, "unless they are grazing on the Alps."-August Lippincott s.

PADDY'S PIPE DREAM.

"Begorra!" old Paddy O'Flarity cried.

"Yez c'n say what yez like, but thot newspaper lied.

It said I c'd see the eclipse if I'd smoke

Asmall bit of glass. Sure a piece I hov broke

And filled up me poipe with the bits nate and small,

And divil a bit c'n I loight it at all!" -August Lippincott's.

Princess Anne Co., Va., Feb. 23, '08. I admire the Southern Planter very much and r ad it carefully every month.

DO NOT EXPERIMENT BUT BUY AN ENGINE THAT HAS STOOD THE TEST. Write for Prices and Catalogue Stockdell-Myers H'dw'e. Co. PETERSBURG, VA. Distributing Agents For VIRGINIA AND NORTH CAROLINA.

W. S. FENTRESS.



The product of 21 years' experience, and the largest plant in the world devoted exclusively to the building of gas and gasoline engines.

[September,

NATIONAL HEADQUARTERS APPA-LACHIAN NATIONAL FOREST ASSOCIATION

Washington, D. C., August 25. The disastrous floods now raging throughout the South, with their appalling damage to human lives and to property, is a striking though lament-able and costly object lesson, said an official of the National Forest Association to-day. With the terrential rainfall in the Piedmont and Appalachian Mountain region, coupled with the criminal deforestation of the mountain sides throughout this section, at the headwaters of our Southern streams, no other result than severe floods can be expected, and this condition. as bad as it is, must steadily grow worse and increasingly more damaging, until our people return to sanity in their treatment of the forests. It proves as no other lesson can, the need of the forest covering, and bears eloquent testimony to what we are preaching day in and day out, that our forests are absolutely essential to the nation's life and must be pre-served, if these woeful conditions and losses are to be prevented.

Such work as our Association is doing, in setting forth the facts: In calling attention to the results of our present methods and policies; in

awakening the interest and conscience of the earnest and thoughtful individual, must in time, and we hope before all the forests are gone, make the South realize that her forests must be saved, and must call forth such unanimous sentiment and effort therefor, that they will be saved.

Surely we are not true to ourselves or to our Southland, if this grave matter, affecting as it does the very life of our people, and their material prosperity now and in the future, does not receive the immediate attention it deserves.

We must have not only the Appalachian National Forest, but we must have State forests throughout the entire South—it is only through and by means of both that forest perpetuation will become a reality.

shi dera- sxshrd etaoi hrdl taoin hrda

PREMIUM LISTS.

The Inter-State Fair, Lynchburg, Va., September 29 to October 2, 1908. Loudoun Heavy Draft and Agricultural Association. Leesburg, Va., Sep-tember 9 and 10, '908.

CATALOGUES, ETC.

Report of the 23rd annual meeting of the Holsfein-Friesian Association of America, June 23, 1908.

State Normal School, Farmville, Va.

Year Book of the American Devon Cattle Club for 1908.

Battens Agricultural Directory. Geo. Batten Company. New York City. A well compiled and useful book.

Profitable Farming with a Gasolene Traction Engine. Horace L. Smith, Petersburg, Va. agent for Hurt-Parr Co., Charles City, Iowa.

THE PREACHER'S ADVICE. "My friends," said an itinerant preacher, "the Scroptural rule for giving was one-tenth of what a man possessed. If you feel you can't afford so much, just give a sixth, or a fourth. according to your means. We will dispense with the next hymn, and take up the collection."-August Lippincott's.

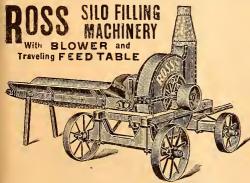
Middlesex Co., Va., Feb. 11, 1908. I feel that the Southern Planter and myself are destined to be life long friends while I farm, as I go to it for counsel and advice whenever needed.

V. E. MARCHANT.

Albemarle Co., Va., Feb. 13, 1908. I would not want to get along without the Southern Planter. It is a great help, especially to the amateur farmer.

J. H. BATCHELDER.

LEADING 1908 UP-TO-DATE LABOR SAVING 20TH CENTURY MACHINERY.



Made in sizes to suit all wants from 5 to 15 Horse Power Engine. Sold on their own merits. Pay for same after tried and satisfied. Write for catalogue. Largest Capacity and Strongest Built.



BROWN Steel Lever Harrows, Wood Harrows, Case-Ring Bearing Disc Harrows, Spring Tooth Harrows, All sizes, plain or with levers. Acme Har-rows of all styles kept in stock at lowest net prices.

SCIENTIFIC STEEL CORN HAR-

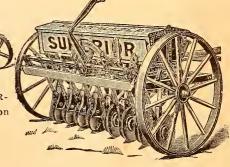
VESTER. The best Harvester on earth for standing corn.

Safety Seats.

ders.

Balers.

Safety Shafts.



SUPERICR GRAIN DRILLS. Plain and Fertilizer, Hoe and Disc

Drills. All sizes.



Studebaker Farm Trucks-with wood "Eli" Horse and Steam Power Hay or steel wheels and removable bolster stakes. Write for prices.

HENING & NUCKOLS, 1436-38 E. Main St., Richmond, Va.

"Milwaukee Corn Huskers and Shred-

[September,

Get a Spotless Farm Wagon.

It doesn't matter where your farm is or how serviceable a wagon you need, one of our One or Two-Horse Spotless Wagons will fill the bill, and do it to your own satisfaction. Prices on freight, collect from our factory in Southern Virginia. Add \$1 to price if you wish them shipped from Richmond, Va.

\$10 Brings a Spotless Wagon to You.

To show you how great our faith in Spotless Wagons is just send us \$10, as a sign of good faith on your part, and we will ship you any Spotless Wagon you desire to your freight office. Examine it, look it over, compare it to other wagons and if you are not convinced it is a great bargain ship back to us and we will send you your \$10 and pay freight both ways. Now, isn't that talking business? If you are satisfied, pay the freight agent balance due and freight and take wagon. Furthermore, after you have tried the wagon you may return if not as represented.

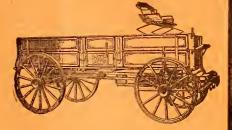


Two Horse Wagon Complete Without Brake \$44.40. THIMBLE SKEIN ONE MORSE SPOTLESS WAGON. With Double Box, Spring Seat and Shafts.

	Size of	ze of	Height of Who		els. Dimensions of Beds			ťy	Prices	
	Skein (Or Axle)	Size of Tire	Front	Hind	Lower	Тор	Length	Capacity	Complete Wagon with body and seat	Running Gear only
2B1790 2B1792	2 ¹ / ₈ x 6 ¹ / ₂ 2 ³ / ₈ x 7 ¹ / ₂	$\frac{1\frac{1}{4} \times \frac{1}{4}}{1\frac{1}{4} \times 5-16}$	3 ft. 2 in. 3 ft. 2 in.	$\frac{3^{1}_{4} \times 8 \text{ in}}{3^{1}_{4} \times 8 \text{ in}}$	9¾ in. 9¾ in.	4¾ in. 4¾ in.	7 it. 6 in. 7 ft. 6 in.	1500 1800	\$27.75 28.75	\$23.40 24.38
			THIMB	LE SKEIN	тюоно	RSE WA	AGON			
2B1793 2B1794 2B1796	23/4 x 81/2	$\begin{array}{c} 1\frac{1}{2} \times \frac{3}{8} \\ 1\frac{1}{2} \times 7-16 \\ 1\frac{1}{2} \times \frac{1}{2} \end{array}$	3 ft. 4 in. 3 ft. 4 in. 3 ft. 4 in.	4 ft. 4 ft. 4 ft. 4 ft.	11½ in. 11½ in. 11½ in.	6 in. 7½ in. 8½ in.	9 ft 6 in. 9 ft. 6 in 9 ft. 6 in.	2000 2500 2700	\$44.40 45.60 46.80	\$37 80 39.00 40.20
	ONE HORSE STEEL AXLE WAGON With Double Box, Spring Seat and Shafts.									
2B1798 2B1800	$\frac{1\frac{1}{8} \times 7}{1\frac{1}{4} \times 7}$	$\frac{11_{4} \times 1_{4}}{11_{4} \times 5-16}$	$3\frac{1}{4} \ge 2$ in. $3\frac{1}{4} \ge 2$ in.	3 ¹ / ₄ x 8 in. 3 ft. x 8 in.	934 in. 934 in.	4¾ in. 4¾ in.	7 ft. 6 in. 7 ft. 6 in.	1500 1800	\$27 75 28 80	\$23.40 \$24.60
			STE	EL AXLE	E TWO H	ORSE W	AGONS.			
281802 281804 281806	1% x 8 1/2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 ft. 4 in. 3 ft. 4 in. 3 ft. 4 in.	4 ft.	$\begin{array}{c} 11\frac{1}{2} \text{ in.} \\ 11\frac{1}{2} \text{ in.} \\ 11\frac{1}{2} \text{ in.} \end{array}$	6 in. $7\frac{1}{2}$ in. $8\frac{1}{2}$ in.	9 ft. 6 in. 9 ft. 6 in. 9 ft. 6 in.	2000 2500 2700	\$46.80 48.00 49.20	\$40.20 41.40 42.60
					AGON EX					
Body Brakes Gear Brakes Gear Brakes	, for one , for one , two hor	horse wa horse wa se wagon.	gon, com gon, com complete	plete						\$1.50 each 3.40 each 2.75 each 3.40 each 4.50 each .47 each
Will make good any and all breaks due to defective workmanship and material which appears in the first year after purchase.							ears in the			
SPO	TLE	SS (CO.,	INC	122	SHOCKOL SQUARE	RIC	HM	OND,	VA.

IMPLEMENTS, VEHICLES AND MACHINERY THE WATT PLOW CO., Richmond, Va.

Root & Vandervoort & Alamo Gasolene Engines from 2 to 25 Horse Power. Write for circular telling of their many good points.



Fish, Moline & Weber 2-Horse Wagons. Champion & Hickory 1-Horse Wagons.

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REINDE

Horse Powers for 2, 4 or 6 Horses.

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Success Manure Spreader.

Baling Presses for Hand and Power.

THE WATT PLOW CO., RICHMOND, VA. 1426 East Main Street. 1438 East Franklin Street.

Northwestern Mutual Life Insurance Company Record of Northwestern Policy'No. 95.216. TWENTY PAYMENT LIFE PLAN, WITH ADDITIONS, ISSUED JANUARY 19, 1878, AT AGE 31. ANNUAL PREMIUM, \$77.08 AMOUNT, \$2,500 The additions to the original policy are\$',765.00 The insured paid the premiums in full, using the dividends to purchase full-paid participating additions to the policy At the auniversary of the policy in January, 1908, the full-paid additions amounted to \$1 765 00 Total premiuins paid 1,541 60 Excess of additions over premiums paid\$ 223.40 Original policy 2,500.00 Thirty years of Life Insurance for an increasing Total paid up policy. \$4,265.00 Total premiums paid 1,541.60 amount ranging from \$2,500 to \$4.265, and a Paid-up Life Insurance Estate of \$4,265 participating in future dividends-obtained at a total cost of \$1,541.60 Insurance exceeds premiums paid by\$2,723.40 T. ARCHIBALD CARY, General Agent for Virginia and North Carolina, 601 Mutual Assurance Society Building, Richmond, virginia. 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. SEND FOR CATALOGUE. BALDWIN & BROWN. 1557 E. MAIN ST., RICHMOND, VA. THE EVERLASTING TUBULAR STEEL PLOW DOUBLETREES. Guaranteed not to Break or Bend. Send for Our Number 8 Catalogue Furnished with Hook or Ring for Plow Mussle. for 1908. Get acquainted with our complete line. also Traces. THEIR USE SPELLS ECONOMY. We manufacture a Ask Your Dealer for Them and Take no complete line of Dou-Other. **DETACHABLE** Singletrees Singletrees, bletrees, This Pattern, No. 105, made in three slzes. and Neck Yokes of with Safety Trace Hooks every description. Pittsburg Tubular Steel Whiffletree Company, Sole Manufacturers, Pittsburg, Pennsylvania. FERTILIZERS FOR LCROPS $\prec \vdash \Delta I$ LEE'S PREPARED AGRICULTURAL LIME Old Reliable for Wheat, Oats, Rye, Clover, Alfalfa and Grasses. LEE'S SPECIAL WHEAT FERTILIZER Continues in favor for Wheat and Oats on thin land." Excellent stands of Clover and Grass secured when Seeded with Wheat. LEE'S HIGH GRADE BONE AND POTASH Good for Turnips, Cabbage and other Vegetables. IMPORTED THOMAS BASIC SLAG PHOSPHATE. A. S. LEE & SUNS CO., Inc., WRITE FOR CIRCULARS DEPT. A. SHOCKOE SLIP, RICHMOND, VA.