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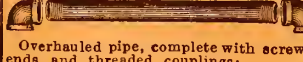
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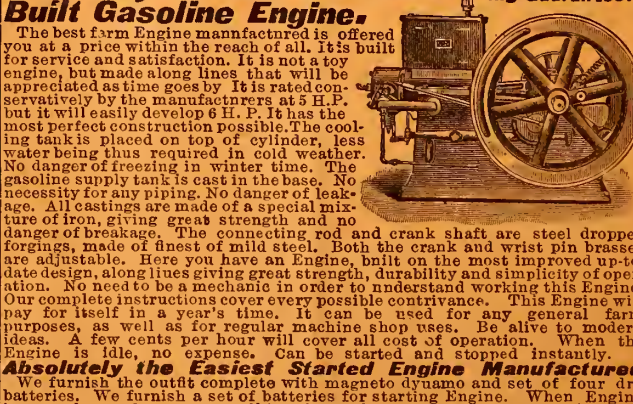


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Agriculture is the nursing mother of the Arts.—XENOPHON.
Tillage and pasturage are the two breasts of the State.—SULLY.

69th Year.

RICHMOND, VA., AUGUST, 1908.

No. 8.

Farm Management.

WORK FOR THE MONTH.

The month of July to this date (July 20th) has been above the normal in temperature throughout all the Atlantic Coast States, and for the last week, (14th to 20th) very considerably above, readings over 90 having been common for several days together. The first week of the month was showery. Since that time we have had quite a droughthy time, and in some sections damage is being done to the crops, though as yet this is not serious, and the indications now are for showers, which have already begun in some sections. We are hopeful, therefore, of a cessation of the damage. A good general rain would soon make good any damage done. Where the moisture in the ground has been well conserved by frequent cultivation it has generally sufficed to maintain growth, and those sections which have suffered have mainly been those where shallow spring plowing was done, and cultivation has been neglected. This hot-dry spell emphasizes what we have so often said: that the only sure means of protecting crops from suffering during the summer in the short dry seasons, which are almost sure, more or less, to occur, is to plow deep in the fall and winter, and especially to break the subsoil so as to make it capable of absorbing and holding the winter and spring rainfall for the summer needs of the crops. We have been much astonished recently to see in one of our Southern contemporaries an article from a leading agricultural scientist in one of the Southern agricultural colleges condemning subsoiling as being useless and unprofitable basing this conclusion on several experiments made at Southern experiment stations, and setting these against the advice given by writers in the agricultural press whom the gentleman seems to regard with contempt, as being mainly theorists without practical experience. As we have probably been more insistent on the value of subsoiling and deep plowing for increasing the crop-producing capacity of our Southern lands than any other Southern writer we feel that this criticism touches us. We want to say to the gentleman that our advice has been based not only on theory, but on long practical experience, and also upon

observation made in places where our advice has been followed. We have subsoiled hundreds of acres, and never without resulting good, either sooner or later. It is practically impossible to secure deep plowing without subsoiling, as the subsoil is unfit to be brought to the surface until it has been broken and water and air let into it; and besides, on most Southern land it is practically almost impossible to break deeply with a turning plow the underlying soil being so compact from long, shallow plowing of the surface that no turning plow will enter it more than an inch or two, and until this deeper soil is broken and aerated it is useless to try to make it available for the production of crops in the place of the exhausted surface soil. In addition, the importance of making the subsoil capable of absorbing the winter and spring rainfall, and thus preventing washing and erosion of the surface soil, and becoming a reservoir for the supplying of moisture to the growing crops in such a time as we are now passing through, is in itself of sufficient value to justify the work of subsoiling. We have never known a crop to be lost on subsoiled land through drouth, and every great yield of corn of which we have any record, has been made on land where the subsoil was deeply broken. Where crops are now suffering from this drouth the land has never been subsoiled, and holds no reserve of moisture of which the crops can avail themselves. Of course, it is useless to subsoil leachy land, or deep sandy land; and no sensible farmer would be guilty of such folly. Such land needs something to compact it and make it retentive of moisture and fertility, and humus will do this, and when filled with vegetable matter to supply this then deeper plowing may be practiced with advantage.

The harvesting and threshing of the Southern wheat crop has been practically completed, and the new grain has been on the market here since the first week of July, and is selling around ninety cents per bushel. The Government report on the winter wheat condition on the 1st of July, or at harvest, makes the same 89 per cent. of a normal as compared with 95 last month, 87 July, 1907, and

a ten-year average of 87. For Virginia the condition is put at 88, as against 91 of last year, and a ten-year average of 82. For Maryland the condition is 88 as against 93 last year, and a ten-year average of 86. For North Carolina the condition is 87 as against 89 last year, and a ten-year average of 81; and for South Carolina 75 as against 72 last year, and a ten-year average of 81. We are afraid from reports that have reached us that this report is not going to be borne out by the threshing returns. We hear of some very short yields being made by crops which, previous to threshing, looked like making good returns. We have been afraid ever since the wet period we had at the blooming time of the crop that results would be disappointing. We never knew wheat to thresh out well which had been caught with a wet season when in bloom. If this should happen to have been the case generally throughout the winter wheat belt it is going to make a considerable difference in the yield of the crop, and that this is so is being confirmed by the fact that the estimated crop is already being considerably discounted. It does not now appear likely that the winter wheat crop will greatly, if at all, exceed 400,000,000 bushels. The condition of the spring wheat crop is reported at 89 as against 87 a year ago, and a ten-year average of 87. It is too early yet to make any definite estimate as to the yield. The weather in the spring wheat section is very varied, part of it is suffering somewhat from drouth, and part of it is having too much wet. The plant generally is said to be looking well so far.

The corn crop is this year planted on an area of nearly 101,000,000 acres, which is one per cent. larger than that of last year. In the South Atlantic States the acreage is over two per cent. larger than last year. In Virginia the area planted is 1,873,000 acres, and the condition of the crop is placed at 95 as against 79 a year ago, and a ten-year average of 90. In Maryland the area planted is 649,000 acres, the condition 90. In North Carolina the area planted is 2,787,000, the condition 92. In South Carolina the area planted is 2,073,000, the condition 89. In Tennessee the area planted is 3,014,000 acres, the condition 87. The general condition throughout the country is 82 as against a ten-year average of 85.

The tobacco crop planted is estimated at 763,000 acres, which is 58,000 acres less than was planted a year ago. In Virginia the crop planted is 17 per cent. greater than last year, and is estimated at 114,777 acres. In North Carolina the increase is 9 per cent., and the area planted is 175,925 acres. In South Carolina the increase is 16 per cent., and the area planted is 25,868 acres. In Tennessee also the area is increased by 23 per cent., and the crop planted is 57,195 acres. In Kentucky the area planted is decreased by 23 per cent., the crop planted being 197,246 acres. The condition of the crop is 86, which is the ten-year average. In the South-Atlantic States the condition is 89 as against a ten-year average of 85.

The apple crop is not going to be a large one in this States, as this is the off-year for most of our old orchards. In some of the young orchards there is a good crop. Possibly we have 50 per cent. of a full crop.

The hay crop has made a heavy yield in this State, and if we have rain soon there will be yet a good second crop, but without this the second crop will be light.

Pastures have been good up to the middle of July, but since then have failed badly, and those who took our advice and planted a crop of sorghum to cut for feed during the summer will now realize how useful such a crop is in an emergency like this.

We hear excellent reports as to alfalfa crops in many sections of the State, and are glad to notice how much more widely experiments are being made than was the case a year or two ago. There is scarcely a section of the State where some farmers are not experimenting with the crop, and in some sections it is being made quite a crop, its success being assured where proper preparation is made. We have now strong hopes that in a few years it will become a staple crop over a large part of the State. We would strongly urge farmers all over the sections of the State east of the Blue Ridge to prepare at least an acre of land for the planting of this crop during this and the succeeding month, which is the best time for seeding it in this part of the State. It is no use trying to grow it on poor land, or on badly prepared land; nor is it any use trying it on wet land. Select a piece of the best land you have, and that freest from weeds, and plow it deeply and break it finely. Give it a dressing of from half a ton to a ton of lime to the acre, and work this in and then make the land richer with manure, well rotted, so as to have killed the weed seeds in it, and with bone-meal at the rate of 300 or 400 pounds to the acre. If possible, get 400 or 500 pounds of soil from a field which is already growing alfalfa, and before seeding apply this and harrow it in lightly. If not possible to get this soil, then try inoculated seed. Sow the seed broadcast at the rate of twenty pounds to the acre, sowing both lengthwise and across, and harrowing lightly. Whilst it is a more costly crop to put in than any other clover or grass crop, yet when once established it produces so many crops without reseeding that the original cost is a small matter to set against the return. We know many who have already cut their crops twice this year making over a ton to the acre each cutting, and they will yet make another cutting, and perhaps two more. It is the most valuable feed that a man can grow, as it is richer in protein than bran, and will take the place of that feed in feeding dairy cattle, and is excellent for horses, sheep and hogs.

Where there is likely to be a scarcity of long feed from the effects of the drouth, we would advise sowing German millet as soon as the land is sufficiently softened by rain to enable a good seed bed to be made. Prepare the land finely and sow 1 bushel of seed per acre broadcast and harrow in lightly. In sixty days the crop will be ready to cut or probably in somewhat less time than this, and will make a good hay to feed to cattle. It is not the best feed for horses especially if any seed is allowed to form before it is cut, as the seed affects the kidneys of some horses very strongly. Some horses, however, can eat it without suffering any ill effects. In order to avoid this as far as possible, cut the hay before the seed forms. Cut at this

time the growing of the crop is not hard on the land as is often thought to be the case.

Buckwheat is another crop which can yet be sown successfully, and will be found to be useful as feed for hogs, cattle and poultry, and it is a fine crop for smothering down weeds, and if not wanted for feed can be plowed down to improve the land. A subscriber who used it in this way previous to sowing his wheat last year, tells us that his wheat grown on this preparation is the best he has made this year, and a long way ahead in yield of all his other crop. Sow a bushel or a little more per acre broadcast and harrow in well. The crop can be cut with a mower or binder, and should be set up in shocks like oats to cure. It can be threshed out with a wheat separator. Crimson clover can be seeded with the buckwheat to make a winter cover crop, and for a spring fallow; but if this is done the buckwheat should not be seeded too heavily, or it may smother out the clover.

Rape may be seeded this month for a fall and winter grazing crop for hogs and sheep. The land should be finely prepared, and the seed may be sown either broadcast at the rate of four or five pounds to the acre, or in drills two feet, six inches apart, sowed at the rate of two or three pounds to the acre. Sown in drills makes the best grazing, the crop being cultivated once or twice and thinned in the rows when the plants come too thickly, so as to give them room for development. Rape will be large enough to graze in six weeks, and if the winter is mild it will stand over and start growth again in the spring if not too closely grazed in the fall. At the Virginia Experiment Station it was found that rape alone was a maintenance ration for brood sows. In Wisconsin rape was fed to hogs with two parts of corn and one part middlings, and a gain of 1.07 pounds made per day. Sheep also do well on rape, but it is not advisable to use it as a grazing crop for milch cows as it is liable to taint the milk, and is also very apt to cause bloating.

Though it is a little late to sow Rutabaga turnips, they may yet be sown with advantage, and both Purple top and White turnips may be sown all through the month. Whilst rutabagas and turnips here in the South are usually sown broadcast, yet it will be found that if sown in drills two feet, six inches apart, cultivated two or three times, and thinned, so as to stand six or eight inches apart in the drills they will make much larger bulbs and a much heavier yield per acre. Grown in this way twenty tons or more can be made to the acre. We have made over thirty tons to the acre. The rutabagas are the hardest and will grow and increase in weight up to December and keep well through the winter, stored in cellars or in heaps covered with straw and soil. At the Laurel Reformatory School, in this county, upon land which, three years ago, did not produce two bushels of corn to the acre, and which has since been improved by growing crimson clover on it, and from which a crop of crimson clover of possibly two tons to the acre was grown last year, and which was then prepared and sown with rutabagas, 740 bushels of these turnips per acre were grown and harvested within four months of the seed being sown, and our informant,

who lives nearby, and also grows turnips, says that if the rutabagas had been left to grow as long as the weather would have permitted, they would have made 1,500 bushels. Our experience has been that both rutabagas and turnips increase faster in size and weight after October up to the time of hard frost than before, and that they should not be harvested before the end of November. To grow a heavy crop of rutabagas or turnips the land must be in good heart and fine tilth, and if not so naturally should have a heavy application of farm-yard manure, which should be supplemented with forty or fifty pounds of acid phosphate per ton of manure applied, and 100 pounds of muriate of potash per acre. If manure cannot be applied, then an application of 300 or 400 pounds of acid phosphate, with 100 pounds of muriate of potash per acre should be made. No man who keeps cattle, sheep or hogs ought to be without rutabagas and turnips as a supplemental feed for his stock during the winter. Whilst they do not by analysis show a high nutritive value, yet experience has amply proven that stock eating roots make better gains from the food eaten than do stock fed on other food without roots. Roots tend to keep the stomach and bowels in proper order, and enable larger quantities of food to be assimilated, and they are, therefore, most valuable. We should like to see more of these root crops grown in the South, and the corn crop could then be fed with more profit.

The saving of the forage crops should have close attention during this and the succeeding month. Do not let the crops become overripe before cutting, as this simply means the loss of much of the feeding value. Cure them as much as possible in the shade, and thus save the leaves and blades which when left exposed too long to the sun burn and are wasted. When the crop has well wilted put into windrow, or into small cocks, and let the air cure it out. These cocks, or windrows, should be opened out, and have an hour or two's sun just before hauling and thus dry off the moisture which arises from the partial heating of the forage in the process of curing. The one great care to be observed is to have the forage free from rain water or dew when packed away in the barn. The presence of considerable natural moisture in the forage will not result in damage if there is no water or dew present. The natural moisture in the crop will cause no trouble. It will make the forage heat considerably in the mow, and will cause the hay to be of a browner color than hay cured in the sun, but this will not injure its feeding qualities. In an article written recently by Mr. Wing, speaking of the curing of alfalfa hay, he said that he always liked to have the hay heat well in the barn, as the stock eat it better, and it seems to do them more good. This is our own experience. We always had our forage crops of all kinds put away in stack or mow in such condition that they heated well, and we never had any spoiled fodder or hay. If put away with water in it, it will heat, and sometimes fire and blaze up, but we never knew this to happen from the effects of natural moisture only. Hay and forage cured and saved in this way is always more appetizing and has a sweeter smell, and is, therefore, more freely eaten.

Sorghum can rarely be so sufficiently cured as to make

it safe to bulk it in a mow or stack. After being cut it should be left to lie open to wilt thoroughly for several days, and then be set up in shocks like corn, and will keep good in this way all through the winter, and can be hauled in as wanted. If put in a mow or stack it will almost certainly mould, as it appears practically almost impossible to dry out the juices sufficiently to avoid this. The strong, hard silicious covering of the stalks keeps the juice in them.

The corn and sorghum intended to be made into silage will be ready for cutting this month and next. Do not be in too great a hurry to cut the crops. Let the grain harden before cutting, and the blades dry somewhat, and the silage will be a better, sweeter product. Do not fill the silo too fast. It is better to cut half a day, and fill half a day. The silo will hold more, and the silage will be better. See that the corn is well spread out in the silo, as it drops from the cutter. There is always a tendency for the heavier corn to accumulate just where it falls from the cutter, and unless this is prevented by spreading out the accumulation over the whole area of the silo the silage will be an uneven product, part of it will have too much corn in it, and part have little or none. When the silo is full cover with cut fodder or coarse hay to the depth of a foot, and water this well, and it will fill with mould and seal the silage effectually.

The land intended to be seeded in winter oats should at once be plowed and commence to be prepared for the seeding of the crop, which ought to be got into the land not later than the middle of September. Long experience and much experimentation with this crop has demonstrated that to be a success it must be sown early, so that it may get good root-hold of the land, and cover it with a mat of verdure if the frost is to be kept from injuring the crop during the winter. The seed also should be given a good cover and therefore, drilling is much wiser than sowing broadcast. The seed should also be sown much more liberally than is the practice generally. Not less than two bushels of seed should be sown per acre, and two and a half or even three bushels would be better. You cannot expect to reap a crop if you do not sow seed enough to make the plants to bear the crop. Instead of a crop of twenty-five bushels to the acre, this crop ought to make at least twice that yield, and we have known three times that yield made here by a crop sown in the first week in September on well prepared land, and then top dressed during the early winter with farm-yard manure. Such a crop is a profitable crop whilst a crop of twenty-five bushels can yield but little beyond the cost of seeding and saving it. Do not select the poorest land you have for your oat crop. Whilst it is true that oats will make some sort of a yield on even poorer land than almost any other crop, yet it is poor policy to try to make poor land poorer by trying to force it to produce a crop. Far better save this land and give it a few hundred pounds of acid phosphate, and some good plowing and cultivation, and put it into crimson clover and a mixture of wheat, oats and rye, and grow a crop to cover it during the winter, and make a fallow to plow down in the spring, and grow a pea crop on. The land will, under

this system, improve and be able to grow next year an oat crop that will pay for all the work and seed and fertilizer put on it. If the land you are to seed in oats is not in good heart, apply 300 pounds of acid phosphate before seeding and work into the land, and then 100 pounds of nitrate of soda applied as a top dressing in spring, or a good top dressing of farm-yard manure applied during the winter will make a crop.

August and September are the two best months in the year for seeding grass and clover in the South, and anyone desiring to succeed with these crops, and who does not, should lose no time in getting to work preparing the land for seeding. We have in a recent issue published an article from Mr. Sandy, describing how he prepares and seeds his grass land, from which he gets such wonderful crops, in a section where a few years ago, it was said hay could not be grown. Read this article and go and do likewise. The great secret of success is early and perfect preparation of the land, the application of a ton of lime to the acre, and then the providing of plenty of plant food in the shape of bone-meal for the crop to feed on. Wherever good farm-yard manure can be applied this also should be used liberally, as the more humus-making material you get into the land, the more likely you are to succeed in securing a permanent stand. Sow no grain crop with the grass. A so-called nurse crop is in the South a robber crop. It simply starves the grass by robbing it of the food necessary to its growth, and thus keeps it small and puny, and then when the grain is cut off the hot sun burns out the grass, and the stand is lost. Sow grass and clover alone and a sturdy, hardy growth is assured, and the sun will never hurt this, but push into a heavy growth. Seed liberally. We would be more liberal in this respect than even Mr. Sandy advises. We never sowed less than two bushels of grass seed per acre, and often three bushels, with twelve or fifteen pounds of clover seed. It should always be borne in mind in seeding grass that however reliable may be the house from which you buy the seed, a large proportion of the seed is incapable of germination, or makes but a weak growth. This is a condition which no seed house can guard against. It is the result of imperfect fertilization of the seed when growing, and may be and usually is caused by the weather at the time of the blooming of the seed crop. Especially is this true of the finer and smaller grass seeds. The only grass seed which can confidently be relied upon to germinate fully is timothy, a large seed, more like a grain. When seeding timothy a peck to the acre is sufficient. When seeding for a meadow select seeds of grasses which mature at the same time. When seeding for a pasture select seeds of grasses which come into their best at different times during the year, and thus secure a long grazing period. Seed clover of some kind always with the grass. If this should be killed out during the winter it can be reseeded in the spring, but if sown early enough so that it can get a good root-hold before the frost comes on, it will rarely be killed out. It is also a good practice to sow some alfalfa seed, say two or three pounds, to the acre with the grass, and thus start the inoculation of the land with alfalfa bacteria, then, when ready to sow an alfalfa crop the land will be ready to produce it. Mr.

Sandy followed this plan a year or two ago, and now the alfalfa on the field seeded has taken full possession, and made a heavy crop. For a grass seed mixture on good loam soil for a meadow sow orchard grass, tall meadow oat grass, meadow fescue, perennial rye, and red top.

For a pasture mixture sow tall meadow oat grass, Virginia blue grass, orchard grass, perennial rye, red top, Kentucky blue and meadow fescue. Sow with the meadow mixture six pounds of red clover and six pounds of alsike clover. Sow with the pasture mixture six pounds of red clover, or alsike clover, and six pounds of white clover.

The sowing of crimson clover, or a mixture of crimson clover, wheat, oats and rye for a winter cover crop, and to make early spring feed, and for a fallow to plow down for a summer crop to follow, should have attention from this time on to the end of September, and then hairy vetch and winter vetch should be sowed up to the middle of November. Wherever land was well prepared for the summer crop good stands of these winter crops can usually be secured by merely discing the land, or breaking it with a cutaway harrow both ways, and then sowing the seed and covering with a spike-tooth harrow. Don't leave any of your fields to be bare all winter wasting fertility instead of gathering it. This is one of the great advantages we possess in the South over the North. We can grow our recuperating crops during the winter, and to neglect to do so is to throw away one of the greatest advantages we possess. Ten or twelve pounds of crimson clover and three pecks of wheat, oats and rye mixed will sow an acre, and cover it with a green sod all the winter, and this will conserve the fertility in the land and add to it and ensure a permanent improvement of the land.

Although too soon to sow wheat, it is none too soon to begin to get the land ready for the crop. Whenever opportunity offers get the teams to work breaking the land, so that it may have plenty of time within which to get compacted again after being worked before sowing the wheat.

NOTES ON THE JULY PLANTER.

Tobacco Fertilizers.

Editor Southern Planter:

Mr. Armistead has a very interesting article on tobacco. Years ago I conducted a series of experiments in North Carolina for the purpose of testing different fertilizer applications. These experiments were particularly directed to the production of the bright tobacco of North Carolina, and were made on land that had never been altered by cultivation, being newly cleared from the pine forest for the purpose, in the sandy soil near Southern Pines. We were so careful not to have anything on the soil that all the trees and growth were dug out and hauled off the land and nothing burned on it, the land being naturally very deficient in all the elements of plant food. I learned there that the fertilization which the late Major Ragland had worked out in Virginia was about as accurate, even for bright tobacco, as any that could be advised. We found that pure dried blood is the very best organic form in which nitrogen can be applied to tobacco. While fish scrap is a good form for organic nitrogen for some crops

it is not the best for tobacco, for there will be some chloride effect from it. I worked out there the following formula: Acid phosphate, 900 pounds; pure dried blood (not blood and bone), 600 pounds; nitrate of soda, 100 pounds, and high-grade sulphate of potash, 400 pounds. I gave this formula to a grower in Granville county, N. C., who used it at the rate of 700 pounds per acre on bright tobacco. He sent me the report of sales of his tobacco at Durham, N. C.—\$34.44 per 100 for the entire crop, lugs and all. This was the best price of that season, when tobacco was selling at fair prices. A grower in the eastern part of the State, seeing this report in print, used the same formula on his land, which is a dark, moist, sandy loam, a very different soil from the high grey soil in Granville, and he reported a heavy, coarse and late crop, just as I would have expected on his soil, and if I had been consulted I would have advised a change for him, with a rather smaller percentage of nitrogen, as his soil was far richer in this element.

This shows that no hard and fast rule for tobacco fertilization can be made for all soils and all kinds of tobacco. Up in Nelson county they plow under the entire growth of clover for tobacco, and get good prices for black wrappers, while in North Carolina the growers of bright tobacco claim that clover or peas preceding their tobacco will ruin its quality. This is mainly, I think, because they do not realize the amount of organic nitrogen the legume crops have left in the soil, and apply their usual fertilizer and thus have an excess for their type of tobacco. I found that the most harm, aside from the use of potash as a chloride, was in an excess of phosphoric acid. When acid phosphate alone was used on a plot the leaf was very thin and silky, so thin in fact that one could see his hand through it, but the veins were very large and coarse, and this seems to be the tendency whenever there is an excess of phosphoric acid. The amount of phosphoric acid in the formula which Mr. Armistead quotes is therefore nearly right, but as the bone will give a considerable percentage of nitrogen, there is in this formula an excess of nitrogen for bright tobacco, unless it was on very poor, dry, sandy soil.

The rotation advised by Mr. Mathewson will be a good one probably for dark shipping tobacco, but hardly for bright tobacco. Mr. Armistead is right in regard to the value of oats as a crop in Southside Virginia to follow tobacco. While they can probably grow wheat well, there is no doubt that winter oats following tobacco will make a far heavier crop and I believe that in that section would bring more money per acre than wheat. I have known 75 bushels of oats per acre in North Carolina, on highly improved land, and such a crop at 60 cents per bushel is worth far more than a crop of wheat on the same land at \$1.00. But almost any one in the Southside section could expect 35 bushels of oats when they would not get more than half that crop of wheat after tobacco, and, as Mr. Armistead says, there is always a ready sale at home for oats. Then some of the best crops of crimson clover I have ever seen were from seed sown in the stubble after harvest and no plowing done. Then this clover, with the home-made manure spread over it in winter, would make a great corn crop, and the land would have had a winter cover, and with peas sown

among the corn the rotation could be greatly shortened and the land more rapidly improved for dark tobacco. In the bright tobacco section I would still use the peas, putting them after the wheat or oats, and not immediately preceding the tobacco crop, and in the bright tobacco section of Eastern North Carolina would put cotton in between the peas and tobacco. The whole matter comes back to the fact that every tobacco grower must study his particular soil and its needs and the needs of the particular type of tobacco he grows. If the Virginia growers would follow the work of Major Ragland they would find that he was very near right in his study of tobacco.

Potash.

There is no doubt, as the Editor says, that the Piedmont country, the red lands of Virginia, are rich in potash, but that potash is not needed on the Tidewater lands and the sandy soils in midland Virginia, I cannot agree. Even in the soils of the Piedmont section, where there is a great amount of potash, it is in a very insoluble condition, and must be released for crops or applied artificially. Lime and plaster will have some effect in doing this, and a restoration of the humus to the soil will do more. But it has been found in other sections equally supplied with insoluble potash, that it pays to use some in a soluble form. The experiments made by the Indiana Station on the clay soils of the southern part of that State, which analysis showed to be rich in potash showed that an application of soluble potash paid well. By good rotation of crops there may be enough potash coming available through the humic acids in the soil to serve the needs of wheat, but not enough for the crops of tobacco or potatoes which especially need potash in large percentage. It has been advised to grind the feldspathic rocks to get potash to apply to the soil. But all the red lands of the Piedmont section are the result of the decomposition of such rocks, and the potash still remains insoluble after untold ages. I found in Albemarle that I could for a time at least get the use of this potash more cheaply through the use of lime than in buying potash salts. But one does not want to lime every year, and unless he uses soluble potash applications he must wait for the accumulation of organic material to help him, and the artificial application of potash on the legume crops will greatly aid him in this. So it seems to me to be merely a question of economy in the production of crops and the improvement of the soil that each man must settle for himself.

Vetch and Wheat.

Mr. Norfleet, to the contrary, I have made the finest of hay with wheat and vetch and the wheat stood up and carried the vetch though the vetch hung over from the top of the wheat, and I greatly prefer to mow the crop than to gather hay with a rake. From the cuts, I should say that the trouble was that there was not wheat enough. Vetch tumbling on the ground will get damaged below and I want the wheat there to hold it up, and it will do it if there is wheat enough.

Cow Peas.

What Mr. Stockbridge says in regard to peas reminds

me of a letter from an Alabama farmer some year ago. He wrote: "What you have been writing about cow peas improving the soil is all nonsense, for I took twelve crops of peas in succession from a piece of land, and it got so poor that it would not grow peas or anything else." Of course it did. There is no crop grown that will more rapidly use up the phosphates and potash in the soil than peas will, and removing any crop annually from the soil and restoring nothing will certainly reduce its fertility. A farmer near here, having a light sandy soil, said that he sowed peas and made hay of them, and planted the land in corn last year and was disappointed in the crop. His land was naturally deficient in phosphoric acid and potash. He planted a crop that used them greedily and applied none to it, and took the crop off and returned nothing, expecting that the pea stubble would make a great corn crop, when the land had been actually reduced in fertility except the organic nitrogen left in the pea stubble. Some farmers need a little common sense.

W. F. MASSEY.

CROP ROTATION.

Editor Southern Planter:

I have just read L. H. McC.'s article on Crop Rotation in your July issue. I note that Brother McC. rather intimates that I was using his thunder without giving proper credit. I have been recommending the rotation of cotton followed by corn and cow peas, then by winter oats, then cow peas for hay or seed, the two gaps in this rotation being filled by winter cover crops to be turned under for green manure, for the past six years, and have published this rotation probably a dozen times. This identical rotation has been urged by the Georgia Experiment Station for ten or fifteen years, and is found on a good many farms down in that section. The Louisiana Experiment Station has used it twenty years. Brother McC. will therefore see that this rotation is so familiar and is so generally recommended in the South that I do not think it necessary to give credit to any one for it.

The fact is, I had not seen his article—a thing which I regret. I like his rotation where cotton is not to be grown. I think, however, that he means sorghum cane instead of sugar cane. The rotation is corn with cow peas, fall-sown oats followed by sweet potatoes in the spring, with sugar cane the next year followed by crimson clover. I am not familiar enough with the cultivation of sugar cane to know whether it would be possible to get a crop of it in such a rotation, but sorghum could certainly be thus grown.

Another very good rotation where cotton is not to be grown would be: First year, corn and cow peas; second year, fall-sown oats followed by cow peas; third year, crimson clover followed by sweet potatoes; then crimson clover, vetch, or bur clover could be sown when the sweet potatoes are dug in order to have something to plow under in the spring for corn.

In fact, the South is better adapted to a variety of corn rotations than the North, and I hope to see the time when the cotton crop of the South will be grown in rotation with grains and forage plants very generally. When

the cattle tick is done away with, the South can then become an important live stock region.

U. S. Dept. of Agriculture. W. J. SPILLMAN.

No doubt the reference is to sorghum and not sugar cane. The Saccharine Sorghums are very commonly called "cane" in the South.—Ed.

THE CONSERVATION OF OUR PLANT FOOD.

Editor Southern Planter:

At the recent Convention of Governors at Washington, at which the importance of the conservation of the natural resources of the country was discussed, the Hon. James Wilson, Secretary of Agriculture, made mention of the great loss of plant food by the removal of crops and the necessity of the return of this plant food if the average is to be continued at its present standard without considering the question of an increased yield.

This loss of the fertility of our soil is no unfounded theory, but an ever-present danger, and is well worthy the discussion of not only the State legislators, but also the National Government, and its importance is shown by the prominent place given to this subject by the Governors Convention.

No country has been so recklessly prodigal of her resources as has the United States. We pride ourselves as the bread basket to which all foreign nations must come for food, forgetting that when we are supplying other people with this food we are only bringing that time nearer when our own children will have to look to other lands for food or else stare famine in the face.

Only a few years ago our own rich virgin soils appeared to be inexhaustible. In fact, cases are on record where the farmer would move the stable rather than draw out the manure. It was easier to bring new land under the plow than to properly care for what had been tilled. To-day, these same farmers are buying fertilizers. Indeed, the trend of Western civilization can be traced across the American Continent by the trail of abandoned farms which it left in its wake. To-day, this is all changed, there is no more West to conquer, and the increasing tide is turned back upon itself and we must build up the old soil, rather than bring new land under subjection.

It is only a few short years since the American Continent has been known, yet, in this time, the yield has dropped to less than half of that of the older European countries. In the United States, the average yield of wheat is some 11 to 12 bushels, while in England, on land that has been cropped a thousand years, it is 33 bushels. How has England kept up the high average? In addition to a systematic rotation of crops and a careful husbanding of her own resources, if we look up trade returns, we shall find that she is the largest buyer of our national deposits of phosphate rock, also, one of the best customers of the German potash mines, and, also, of the owners of the nitrate beds and guano deposits. Her ships bring the bones from the mountains of India, the plains of South American, from the whale fisheries of Newfoundland, and, also, we regret to say, from our own packing houses in the West.

Would it not be well to stop while the sky is clear and ask ourselves what the future will be? And will not the answer be the same as that of the watchman on the tower?

"It is clear overhead, but there is a cloud in the distance." It is clear overhead at present; our farms are producing abundantly; we are sending the products of our farms out to enrich the whole world. But what of the future? How about the cloud of crop failures and famine which lies in the distance? Under our present reckless waste after a thousand years, instead of growing 33 bushels of wheat per acre as England does, our crops will be below the limit of profitable production and, instead of a nation of happy homes and contented people, we shall be enveloped in a cloud of misery and starvation.

This, you think, is a dark picture, but it is only the natural result of our present course and it behooves us to look for a remedy before it is too late. What should be done? The answer is comparatively easy, though the application may be more difficult.

All plant foods, more particularly the nitrogen, potash and phosphoric acid should be returned to the soil so that the fertility may be kept the same and, where possible, a greater amount should be returned to act as a reserve store of plant food in the soil. The humus should also be kept up to the same proportion that is found in virgin soils.

Nitrogen.

With nitrogen and humus, this process is comparatively easy if properly understood, as nature has provided for this in the fact that four-fifths of the atmosphere is nitrogen and that the legumes, such as the peas and clovers, can make use of the nitrogen through the action of bacteria and at the same time they will increase the humus content of the soil. It has also been found that where there is a sufficiency of potash, phosphoric acid and lime in the soil, that a certain bacteria in the soil will absorb the nitrogen of the air and make it available for the use of the plants.

Phosphoric Acid.

With phosphoric acid we have a harder problem, but as in the Southern States we have enormous deposits of natural phosphate rock it is simply a matter of the preparation and application to the soil of sufficient phosphoric acid. It would be good policy, if necessary, to place an export duty on phosphate rock and bone and other valuable fertilizer ingredients, to prohibit the export of these, and thus conserve these national resources for future generations.

Potash.

With this important ingredient of all plants we see our greatest danger, as the United States has no known deposits of potash.

True, many will say that our granite rocks contain potash. This is true, but, owing to its insoluble form, no process is known by which it may be made available for plant growth, and even if such process were known, owing to the hardness of the rock, the small percentage of potash with the expense of grinding and transportation would make its use unprofitable.

Potash gives to the wheat its plump, hard berry, and good milling quantities; adds the blush to the peach and the bright red cheek to the apple; gives the flavor and snap to all fruits. Without it, the strawberry would be

pale, soft and insipid; the oat straw soft, and the grain light and worthless.

Let us now look at the quantities which are required for our chief crops. Oats require three pounds of potash for every one of phosphoric acid; wheat a little less—about one and a half pounds. The apple requires about the same amount as the oat crop. While the great American staple, tobacco, requires over 12 times the potash it does of phosphoric acid, cabbage 4 times the potash, and potatoes, another staple, over 3 times as much potash as they do of phosphoric acid. While the clover plant (called the mortgage lifter, which is equally true of the cow pea from their power to add nitrogen and humus to the soil) requires for its best growth about 4 pounds of potash to everyone of phosphoric acid; timothy hay, another staple, requires about the same as clover. Does it not behoove the American farmer to jealously guard this valuable material from all loss, and is it not a suicidal policy, while there are no known deposits at home, that we should export vast quantities in the grain and other food stuffs without at least buying sufficient potash to take the place of that sold?

Secretary Wilson has indeed been a true friend in sounding the alarm, and each farmer, as well as State and national trade and commercial association, should consider his warning carefully.

G. FRED MARSH.

Ithaca, N. Y.

APPLYING FERTILIZERS.

Editor Southern Planter:

When and how to apply fertilizers is an important matter in all those sections where it has been found that commercial plant food must be used in order to secure increased yields of our leading farm crops. The method of applying fertilizers and the time as well will be determined largely by the sources from which the materials used are derived. Potash salts may be applied a considerable time in advance of planting because this element is not easily leached out of the soil. The same is true of phosphoric acid but with nitrogen it is different. Where organic forms of this material are used they may be safely buried in the soil as they become rather slowly available, but when such a quickly available form as nitrate of soda is used, it will be better always to apply it as a top dressing after the crop is up and growing so that the nitrogen may be absorbed and utilized by it before it can be washed away. When combination fertilizers, or complete manures are used, organic nitrogen or that obtained from dried blood or fish scrap will be largely utilized with potash and phosphates. These mixtures may be added to the soil at the convenience of the farmer and may precede crop planting by two weeks or more. It is a wonderful convenience to the farmer to be able to use a mixture such as cotton seed meal, acid phosphate and muriate of potash or kainit because he can apply it at a time when his land may not be in suitable condition by reason of seasonal conditions for planting. Hence, in the selection of a fertilizer much attention should be given to factors of such great importance as these.

Whenever the soil is well supplied with vegetable matter and it is only necessary to use phosphates and potash these manures may be applied either at the time of plant-

ing or in advance of the same, and it will be perfectly safe to put them down in the ground, either under the drill row or scatter them broadcast and harrow in, according to which is the most convenient. On thin, poor lands, or on truck crops, it will generally be better to put the material underneath the drill row, as the young roots will more quickly reach it there and the crop obtain the extra supply of plant food which it needs in the shortest time.

The nature of the crop will have an important influence on how and when to apply fertilizers. Some crops have a long season of growth; others a short season. For immediate and quick returns put the fertilizer close to the crop. Where the season is longer and the feeding powers of the plant more pronounced, as in the case of corn and cotton, it will often be advisable to apply at least part of the fertilizer broadcast, if not all of it. A part may be put under the drill row at the time of planting the seed, and the balance, especially where heavy applications are made, broadcast over the land and harrowed in, as these crops will have ample time in which to gather the available food elements from the soil.

It is inadvisable in most instances to apply phosphates and potash as a second application to such crops as corn and cotton. There seems to be a belief that frequent applications of food elements like phosphates and potash will pay. This seems rather a doubtful proposition, as they are not anything like as quickly available as nitrogenous compounds, nor are they so easily lost from the soil—two points which it seems necessary to repeat over and over again in order that they may be properly appreciated. Instead of making a second and third application of potash, it would be infinitely better to use a larger quantity of the concentrated salts at the time of planting. A great many people imagine if they have put on a small quantity of potash they have answered every requirement of the crop. All farm crops have a great affinity for potash, as it is necessary for the discharge of their vital functions. An application of 200 pounds of a 2-3-2 fertilizer, containing four pounds of potash, is little better than none at all. There is no single crop raised which does not require a much larger amount than this. An application of 50 pounds of muriate of potash will not be too much for most crops, while for sandy and very thin and worn lands from 50 to 100 pounds will be more likely to give profitable returns to the farmer.

The selection of high-grade concentrated plant food rich in the two mineral elements especially is the most profitable practice for the farmer to pursue, and when he follows this plan and uses some discretion in distributing his material according to the peculiarities of his soil and with proper regard to the crop he desires to grow, he need have little fear as to the results which will follow both in the way of increased yields and the permanent maintenance of fertility.

A. M. SOULE.

THE DANGER OF CRIMSON CLOVER HAY AND SOME OTHER NOTES.

Editor Southern Planter:

Some years ago the Department of Agriculture issued a bulletin warning farmers of the danger of feeding crim-

son clover hay to horses, if the clover had been allowed to advance in maturity till the heads had elongated and turned brown, as the stiff brown hairs would ball in the intestines.

Some months after the issue of this bulletin I met a veterinary surgeon in Talbot county, Maryland, while waiting on a railroad platform for a train, and we got to discussing the bulletin. He said that in his experience there had been more deaths of horses from eating the hay made from this clover while young and immature than when allowed to ripen further, but that in either case it was very dangerous to horses.

I had fed the hay to my driving horse, having been careful to cut it as soon as in bloom, and had no serious results. But in my case the clover was fed in a very small quantity, the bulk of his ration being good grass hay, which probably prevented the great accumulation of hairy material from the clover, which would take place where the clover was the sole hay ration.

But to-day my confidence in the young-cut clover has had a rude shock. Walking along the street a veterinarian passed in a buggy and stopped and hailed me, saying that he had something to show me. Unwrapping a bundle he showed a smooth round ball a little larger than a base ball. "I cut eleven such balls from the intestines of one horse which had died before I reached him this morning, and would have died in any event, because the balls had ruptured the intestines from their great size. This horse had been fed on crimson clover hay that was cut when only two-thirds in bloom." There seemed to be no signs of the coarser hairs one would expect from the brown hairs of the blossom heads, and one ball which he had cut open showed that it was made up of layers of felted material about the thickness and toughness of an ordinary felt hat, and all evidently made up of the fine hairs that clothe the plant. The horse was a valuable one belonging to an intelligent man and a careful feeder, and the clover hay was evidently the cause of the death of the horse, though cut at the most innocent stage as supposed.

I am satisfied therefore that it is time to sound a warning against feeding crimson clover hay, cut at any stage, to horses though any ruminating animal may eat it with impunity, but hereafter I shall never feed it to a horse, certainly not as an exclusive hay ration. With part of the ration made of corn fodder or grass hay, the danger may not be so great, but as an exclusive hay ration for horses I am satisfied that crimson clover hay should be abandoned.

Coming so early in the season, it is the hardest of all legume hays to cure and I have never had perfectly satisfactory experience in the making of crimson clover hay, and what I have seen around here is a bleached, sun-cured, article that I would not class as good hay at all, for any animal. As a rule, I do not like to use a good feed crop as manure direct, but am inclined to think that perhaps this is the best use that can be made of crimson clover. Turned under in spring, when the soil is cool, and followed by a hoed crop that will to some extent aerate the soil, it will prove a valuable help in the growth of the corn, cotton or potato crop, and especially the sweet potato crop, making a better and cheaper humus-making

material than the pine leaves the eastern shore Virginia truckers so laboriously rake up and haul on their sweet potato ground in the winter to turn under for the sweet potato crop.

Trucking on the Eastern Shore.

I was down through Accomac and Northampton last week, and while they do raise a great amount of truck there are prosperous largely because of their selling organization, it seems that they are very far behind the times in many things. I passed hundreds of potato fields from which the crop had been dug or was being dug, and in every one where the harvest was going on I saw that they were digging with the one-horse turning plow. There may be modern potato diggers there, but from the train I did not see one in use. Then I did not see any cow peas sown anywhere, but on the fields from which the early potatoes and the early garden peas had been harvested they were planting corn instead of putting a crop there to help the land for another season. Then passing through the same district in winter I saw the land that had produced the sweet potato crop lying bare to waste in the winter rains in that mild climate, when a crop of crimson clover would have saved a great deal of fertility that wasted in winter, and would have added nitrogen too from the air. All through that trucking region in February one may see them hauling out the pine leaves and rotted trash from the woods and spreading it to plow under for the sweet potato crop, when a few pounds of clover seed, or even rye, would have given them more and better organic matter, and would have saved a great deal of labor. The pine woods in that section have been so carefully raked every year that the woodland is the poorest land on the farms.

I saw at one place a pine thicket that had been grown from sown seed, for the trees were in regular rows and laid off in blocks by wagon roads at intervals for hauling out the leaves. All that labor of sowing pine seed and growing a thicket solely to get organic matter to spread on the land, when more and far better could be grown by the sowing of seed that would have given the soil a winter cover too.

They grow fine crops of sweet potatoes there, but spend a large amount of needless labor and certainly need waking up to more modern methods. They will get a corn crop after the early potatoes and peas, and cabbages, but the land will again need heavy applications of commercial fertilizers, for hardly any forage is made and few cattle fed. They are hard-working and prosperous people, but could be much more so with a wiser treatment of their soil.

Crimson clover would work wonders in that country, and I disliked to see such backward methods in the county where I was born.

I started out merely to warn against the danger of crimson clover hay, but, as usual, have run away from my subject.

W. F. MASSEY.

We have repeatedly warned farmers through our columns as to the danger of feeding crimson clover hay to horses after the seed has begun to form. We had our attention first drawn to this matter several years ago when one of our subscribers who had lost two or three

horses from some unknown cause had one of them opened and took from the bowels a ball as large as a small orange, made up of the hairy hulls of the seed heads of crimson clover. This ball he sent to us for examination. The hairy, fuzzy matter had accreted round a small pebble and was laid around in successive layers like felt, and this ball completely stopped the passage through the bowels.—Ed.

COMMERCIAL FERTILIZER IN IMPROVING LAND.

Editor Southern Planter:

Without using high-sounding names or giving analyses of fertilizers or soils (for very few of our farmers understand either), I will give some of my experience and observations as to results from the use of fertilizers.

In the beginning I want to say that to be a successful farmer you must first put humus in your land. The surest and cheapest and quickest way to do this is to raise leguminous crops and don't plant these in depleted land expecting to harvest anything from the same the first year, but rather return the whole crop to your soil and plant to the same crop the ensuing year. With a good clover sod once secured, you can very safely count on the succeeding crop. To illustrate my plan: I begin with German (crimson) clover, which I find to be the quickest to respond on poor land. The first planting I prepare the land thoroughly by deep plowing and apply all of the barn yard manure that I have and broadcast over this one thousand pounds of prepared lime containing at least 2 per cent. of potash, and then mix this in the loose soil thoroughly with a disc harrow. Be certain that you have good seed and sow five gallons per acre. In this section (southeastern Virginia) sow about September 15th. In January, when the land is not frozen nor miry, top-dress with barn yard manure that is not lumpy. With this preparation, if your land is not very thin, and you have a good growth, allow your calves to graze it after it commences to bloom, and, if the land is needed for pasture, graze it until September 1st. Then break and prepare as you did before, except in the place of lime use eight hundred pounds of 16 per cent acid phosphate per acre, and sow six gallons of German (crimson) clover seed per acre. Top-dress in January as before. We can cut the clover by May 10th. Then we break the land, apply 200 pounds 2-8-2 fertilizer per acre and harrow the whole with a pea weeder and plant corn. As soon as the corn is in sight we start the harrows.

At the second plowing we apply four tons barn yard manure, or woods mould, containing 200 pounds kainit, thoroughly mixed with the litter, about four weeks previous to using. When we are ready to plow the corn the last time, we use 100 pounds of nitrate of soda put on one side of the corn then in a few days we work the other side and put another 100 pounds of nitrate of soda per acre.

With this treatment I have produced from land that formerly yielded 15 bushels of corn, 50 bushels per acre, and only missed one crop and then had fine calves from it that year. Not only so, I can and do make three times as many peanuts or cotton per acre on a good clover sod than I can without it. Away with the idea that corn must be "stunted" at some period for the want of plant

food or work. My experience does not teach me that. Our farmers are wasting thousands of dollars using commercial fertilizers on naked land when they could get humus by raising legumes and stock at a much less cost. They should rotate their crops in a way to return humus to the land at least once every two years, then properly balanced fertilizers would pay. Land void of humus cannot assimilate much guano (commercial fertilizer). The richer and the more humus you have in your land the more guano (commercial fertilizer) you can use to advantage, and vice versa. Feed your land properly and that will feed you. Look out for the little things on the farm and the larger things will care for themselves. Produce home supplies and the price for staple crops will not cause you much anxiety. Devote a part of your time to reading your farm journals and other literature on your table, and make three blades of grass (or clover) grow where one formerly grew. Put some brains in your business, and the day is not distant when the highest official of our land or the largest banker may well envy the title of being an "American farmer."

Southampton Co., Va.

C. P. GRIZZARD.

We would like our correspondent to figure out and publish the profit in producing crops by his method. Farming is a means to an end, that end being profit on products and improved land.—Ed.

THE FERTILIZER PROBLEM AGAIN.

Editor Southern Planter:

In order that the farmer may intelligently compound his own fertilizer, he must possess first a knowledge of the manurial requirement of the crop to be grown, and, second, some information as to the deficiencies of his land in nitrogen, phosphoric acid and potash.

As an illustration of how this may be obtained, let us consider the composition of the cereal wheat.

A crop of 12 bushels of wheat, which is, according to the report of the statistician of the Department of Agriculture, the average yield per acre for the State of Virginia, removes from the soil for the grain alone approximately,

18 lbs. nitrogen costing 15 cents lb. or	\$2.70
6 lbs phosphoric acid costing 4½c. lb. or	.27
4 lbs. potash costing 5 cents lb. or	.20

\$3.17

and the straw, supposing it required a ton to produce the 12 bushels per acre, would consume, approximately,

12 lbs. nitrogen costing 15 cents lb. or	\$1.80
2 lbs. phosphoric acid costing 4½ c. lb. or	.09
10 lbs. potash costing 5 cents lb. or	.50

\$2.39

A total of 30 pounds nitrogen costing	\$4.50
A total of 8 pounds phos. acid costing	.36
A total of 19 pounds of potash costing	.70

\$5.56

It would seem, then, that the fertilizing constituents of wheat may be purchased for \$3.17 and the straw for \$2.39, and that where land is lacking in all three of the fertilizing elements usually applied to our soils they could

be purchased and the wheat grown and sold at \$1.00 a bushel and the straw at \$5.00 a ton, making a total of \$17.00 per acre gross receipts, and still have a margin of \$11.44 per acre to meet the expenses of seeding and harvest.

Fortunately, for humanity, however, this condition of affairs is never met with in practice, for the natural weathering and disintegration of the soil furnishes a small annual supply of phosphorous and potassium while the decay of vegetable matter, found to some extent in all soils brought in contact with air and water, furnishes us with some nitrogen. In fact, I take it that 75 per cent. of the wheat grown in Virginia is grown without the use of commercial fertilizers, and therefore depends for its elementary composition on the decomposition of the soil together with the vegetable and animal matter deposited on or in it, and this conclusion would be borne out by the experiments at Rothamstead, where on one plot wheat has been grown annually for nearly a generation without the application of manure or fertilizer and with an average yield per acre of 11 bushels and 3 pecks per annum.

Theoretically, it would seem that if the natural fertility of our soils would produce 12 bushels of wheat per acre for an indefinite period that the annual application of the amounts of nitrogen, phosphoric acid and potash indicated in the preceding tables should produce not 12 but 24 bushels, and I imagine that this would be pretty near the truth if we had such a climate as England, and could eliminate all danger from insects and the various other ills that our crops are heir to, and manage so that no nitrogen should be lost by evaporation, no acid phosphate should revert, and all potash should be available. At any rate, it would be worth a trial on an acre by any wheat raiser who is dissatisfied with his yield, for it would leave a very fair margin of profit with \$23.44 per acre net returns after paying the fertilizer bill.

What our farmers are generally trying to do is to produce their own nitrogen by growing legumes and buying only the phosphoric and potash, and this is of course the better plan as a reference to the preceding table will show that the nitrogen is by far the most expensive element, costing \$4.50, as against \$1.06 for the phosphate and potash combined. I must say though that as a general thing the farmers in this section are failing to get enough nitrogen from leguminous crops to balance the acid phosphate and potash they apply, for I believe in the great majority of cases the lack of nitrogen is the controlling factor in the yields of wheat in this part of Tidewater Virginia.

This condition of affairs would seem to point toward the purchase of nitrogen in the fertilizer and this may be necessary, but I would rather advise the application of the acid phosphate and potash to the preceding leguminous crop in the hope of forcing that to a luxuriance of growth that would cause it to accumulate the maximum amount of nitrogen possible before resorting to the purchase of nitrogen at 15 cents a pound.

To go back to the original subject, if we want to compound a fertilizer for wheat where all the properties are lacking in the soil, we find that we want the proportions as follows: Thirty pounds of nitrogen, eight pounds of phosphoric acid, and 14 pounds of potash; or, 300 of nitro-

gen, 80 of phosphoric acid, and 140 of potash in each ton. And then apply 200 pounds per acre of the mixture:

300 lbs. of nitrogen would be 15 per cent. of a ton.

800 lbs. of phos. acid would be 4 per cent. of a ton.

140 lbs. of potash would be 7 per cent. of a ton.

And this combination can be made as follows: 1,275 lbs. sulphate of ammonia, carrying 12 $\frac{3}{4}$ per cent. of a ton; 328 lbs. nitrate of potash, carrying in the ton, nitrate, 2 $\frac{1}{4}$ per cent., potash 7 per cent.; 397 lbs. of either basic slag, raw bone meal or any material carrying 20 $\frac{1}{4}$ per cent. of phosphoric acid, as 20 $\frac{1}{4}$ of 397 is approximately 80 pounds of actual nitrogen, which in turn is 4 per cent. of the ton.—P. A. 4 per cent.

Result.—Nitrogen 12 $\frac{3}{4}$ per cent. plus 2 $\frac{1}{4}$ per cent equals 15 per cent.—P. A. 4 per cent., potash 7 per cent.

Here is a formula for wheat which supplies every necessary element on the generality of soils in the exact proportion they will be consumed by the crop. It should cost to manufacture \$55.60, should be applied at the rate of 200 pounds to the acre, and should supply fertility enough to increase the yield of wheat 12 bushels to the acre and cost \$5.56 per acre to apply.

Now, let us pass on and consider the problem that confronts the farmer who has by the growth of legumes accumulated sufficient nitrogen to make his crop of wheat and only needs to buy the phosphoric acid and potash.

Taking the same yield, or 12 bushels per acre, as containing the amount of chemicals we propose to supply, we find that we will need on each acre 8 pounds of phosphoric acid and 14 pounds of potash, such a combination can be made from 280 pounds of muriate of potash and 500 pounds 16 per cent. acid phosphate, making in all 780 pounds of the mixture, which must be applied at the rate of 78 pounds per acre to supply the necessary minerals to the soil. If a ton is desired, mix 560 pounds of 50 per cent. muriate of potash and 1,000 pounds of 16 per cent. acid phosphate with 440 pounds of filler composed of any harmless matter that will drill, and we have a ton of fertilizer analyzing, phosphoric acid (available), 8 per cent; potash, 14 per cent., and this combination should be applied at the rate of 100 pounds to the acre and should cost \$21.20 a ton or \$1.06 per acre, as against \$5.60 a ton—\$5.56 an acre—for the fertilizer which contained the required amount of nitrogen—a saving of \$4.50 on an acre by the growth of legumes, always provided that they make and store enough to balance the phosphorous and potassium applied.

That these percentages are totally at variance with the amounts found in ready mixed fertilizers for wheat, I am well aware, and also that the experience of our best wheat growers and the advice of our Experiment Stations all tend towards a predominance of phosphoric acid over other constituents, but these facts cannot be raised against my figures because the second consideration mentioned in the beginning of this paper has not as yet been taken into the discussion; that is the deficiency of the soil in the elements sought, and is also affected by another condition—the rapidity with which such elements are reduced to availability by the action of the weather. These questions can only be answered by the farmer, each for himself, by experimental plots on his own land, for one farm differs

from another in fertility just as "one star differeth from another star in glory."

Still it would appear that we could learn something from the chemist, and that is the amount of matter, whatever it may be, we should apply.

In regard to the criticism of N. in the June issue (page 522), I would say that he has misunderstood my meaning; the percentage is part of the ton, not of the constituent.

The suggestion in regard to the phosphoric acid is good.

Still as all fertilizer manufacturers use the terms ammonia, phosphoric acid and potash, and as nearly all tables compiled by our Experiment Stations and agricultural writers are for these combinations, rather than for the elementary substances, it would be a rather difficult matter to inaugurate a change otherwise than by general consent of the press and public, or by legislative enactment.

I am very sorry that N. notices the other "slips of the pen," and hasten to say that I entirely exonerate the proof reader. Could N. peruse one of my effusions in the original manuscript he would withdraw the stricture; as one of my friends remarked to me not long ago: "Hicks, if I wrote such a hand as you do, I assure you I would sue my teacher for damages.

PERCIVAL HICKS.

Mathews Co., Va.

CIRCUMSTANCES ALTER CASES.

Editor Southern Planter:

My article in the May Planter has evoked considerable discussion and has aroused the ire of Mr. Clarkson particularly. He evidently belongs to the Roosevelt class, who would simply wipe off the map all those who do original thinking and dare to express their thought out loud.

He has a particularly poor opinion of the ability of a farmer who would advocate 12 pounds of clover seed to three acres, little or no preparation before planting, shallow plowing, and 60 pounds per acre of acid phosphate.

This does look bad, but I plead not guilty to the whole indictment. The 12 pounds of clover seed was 12 pounds per acre, a slip of the pen or printer. I did not mention 60 pounds of acid phosphate per acre only as what was put on in the drill in addition to the other fertilizer applied with wheat drill. I said \$1.75 worth, or about 225 pounds. Neither did I ever advocate shallow ploughing or careless preparation, but simply said that eight inches is too deep to plow this land in spring when it had been only scratched with a one-horse plow before. Six inches is as deep under these circumstances as nine inches in previously well plowed land.

I do not know anything about Essex county soil, but would like to ask Mr. Clarkson or any other reader if they ever plowed up any of this hard red clay about twice as deep as it ever was plowed before then disced and worked it down fine in a wet spring and grew good corn after. Mr. C. thinks the lack of rain lets Mr. Sandy out, but this deeply plowed, well prepared land fired worse than any corn I had in spite of six cultivatings. This leads up to the question of Mr. Hindle who, with probably very different land, produced a fine crop. Mr. H. does not see the philosophy of the two spring plowings or why the top should be kept stirred or scratched, as he terms it, and loose underneath. If Mr. H. tackles any red galled land, he will find it very different from the Illinois prairie.

soil where the principle thing is to sprout and kill the surface weeds. Illinois soil is often too loose and needs compacting. The red soil in this section is too hard and needs loosening. No need to worry about turning up weed seeds. This land is too poor to grow weeds.

I believe I have advocated deep plowing and thorough cultivation before planting ever since I began farming, nearly thirty years ago, having learned it from an old Pennsylvania German farmer, who was an expert.

My first effort was in the dry climate of Colorado, where such culture will double ordinary farm crops. I moved to Ohio about ten years ago and, knowing the wonderful success of Mr. Terry of that State, tried it in southeastern Ohio. Soon found Mr. Terry's theories and my own would not work out at all on that soil, which was a thin, light clay, with no grit hardly in it. Made worse failures than my demonstration acre here last year. Applied to Dr. Thorne for advice and went to using acid phosphate, steamed bone, meal, etc., and soon grew good crops. Tried all kinds of stuff from nitrate of soda down to floats, but found acid phosphate or steamed bone the best. A large section of Ohio responds well to applications of phosphoric acid only. Here in Virginia I have still another kind of soil; in fact, several new kinds, as I have red gravelly, grey sand and gravel on red subsoil, also on light subsoil also a little dark loam.

These different soils, in my opinion, need different treatment, but when a lot of this red, raw soil is turned up so much spring working is injurious in my humble opinion. The one-horse plow and the double shovel beat the disc harrow the weeder and the 14-tooth cultivator for growing corn on this kind of soil in present condition.

I wish to report that the crimson clover on the heavily fertilized land did much better finally than the balance of the field. I let it all go to seed, plowed it under and sowed peas, the clover coming up finely in the peas. Is this volunteer clover likely to survive the summer? If it does, think I shall be able to report better corn another year.

My citation of Dr. Thorne's work in Ohio was simply to show what acid phosphate was doing there and Prof. Massey is mistaken in his remark in July Planter that these small amounts of acid phosphate were used in connection with manure. No manure was used on these plots at all and all crops taken off. Where he used acid phosphate with manure he used 40 pounds per ton of manure and 8 tons manure per acre, or 320 pounds acid phosphate per acre.

Last August I carefully prepared an acre for grass, put one ton of lime on three-fourths of it, and four loads rotten manure on the other one-fourth; 425 pounds raw bone meal was applied to the whole acre, and clover, red top, and timothy sown August 31st. Result, fair stand of grass and clover over whole acre, but the one-fourth acre, unlimed but manured, produced more hay than all the rest of the acre. Shall not moralize any on this, as I do not wish to excite Mr. C. this hot weather.

Success to the Planter. Let's have every one's ideas on how to improve this hard, dead soil.

Charlotte Co., Va.

T. M. RAND.

Your crimson clover will no doubt stand and make a winter cover for the land unless the peas make too heavy a growth and smother it. We have known good crops to be secured in this way.—Ed.

Trucking, Garden and Orchard.

WORK FOR THE MONTH.

The gathering, shipping and storing of the products of the garden, orchard and vineyard should receive constant attention as the products mature. Be careful to cull and sort all products which are to be shipped and send for sale only those which are perfect and thus secure a reputation for the quality of your products. The shipping of inferior products is largely the cause why prices are so often broken on the market, when if only the best were sent by every shipper good prices would be maintained. All inferior and defective products should be utilized at home or, if shipped, should be sent in separate packages and be distinctly marked as seconds or culls. Cool off all products before they are packed and see that the packages are well ventilated. Don't let fruit become overripe before gathering and gather carefully and see that it is not bruised in the handling.

Celery plants should now be set out where they are to grow to maturity. The land upon which they are to be planted should be worked finely and be made as rich as it can well be made with farm yard manure, and if this be not in sufficient quantity supplement with a fertilizer analyzing 7 per cent. of ammonia, 5 per cent. of phosphoric acid, and 8 per cent. of potash. Such a fertilizer can be made by mixing 250 pounds of nitrate of soda, 600 pounds of dried blood, 850 pounds of acid phosphate, and 300 pounds of muriate of potash to make a ton. Apply at the rate of 1,000 pounds to the acre, if used alone, or 500 pounds to the acre if used in conjunction with farm yard manure in liberal quantity. Mix the manure and fertilizer well into the soil and lay this off in beds 5 feet wide, keeping them flat. If more than one bed is required, there should be a space of 8 feet left between each bed to provide soil for earthing up the plants. The plants should be set out in rows across the beds one foot apart with 11 plants in each row, thus making them 6 inches apart in the row. After the plants are all set out, keep the beds well cultivated and free from weeds and see that the plants do not suffer for want of water. Never cultivate or handle the plants when wet with dew or rain, or they will rust. As the plants grow the outer leaves will spread out on the ground. This should be prevented by putting earth enough around each plant to keep the leaves upright, but use no more than is necessary for this purpose, as the earthing up of the crop to blanch it should not be done until it has practically completed its growth, say, in October or November.

Seed for raising fall cabbage should be sown in a moist situation on rich land and the plants should be pushed on as fast as possible by the use of top dressings of nitrate of soda so that they may outgrow the worms and bugs. Flat Dutch and Savoy are the proper varieties to raise for this crop. The plants should be ready to set out in September.

Brocoli plants should be set out. These make heads

like cauliflower to be cut in October, November and December. The crop requires the same treatment as cabbages. The heads now sell freely on our local markets.

Land should be prepared for the fall setting of strawberry plants. Break deeply and finely and encourage the germination of the weed seeds by frequent cultivation so that when the plants are set out the weeds may not trouble them. Next month will be early enough to commence setting out the plants. Apply the fertilizer during the cultivation of the land this month so that it may become available immediately and thus give the plants a good start before frost.

Sow crimson clover on all land as it is cleared of the summer crops to conserve the fertility and make a fallow to turn under in the spring.

PROGRAMME OF VIRGINIA STATE HORTICULTURAL SOCIETY OUTLINED.

Editor Southern Planter:

A meeting of the Executive Committee of this Society was held at Crozet on June 25th, simultaneously with a meeting of the stockholders of the Virginia Apple Growers and Packers Association in another building. Keeping in view the recommendations made by the Joint Committee of this Society and the State Board of Agriculture, it was decided that arrangements be made forthwith for an exhibit of Virginia fruits at the Interstate Fair, Lynchburg, and the State Fair at Richmond this fall. With a view of co-operating with the Fair Associations for the promotion of the best interests and credit of the State, the Society's exhibit will not be entered in competition for premiums, thus leaving these open to individual exhibitors. It was also arranged that one of the members of the Executive Committee should accompany this exhibit to the State Fairs at Raleigh, N. C., and Charleston, S. C., later. Some \$400 was set apart for the purpose of offering premiums to insure a fine exhibit at the annual meeting of the Society at Lynchburg on January 6th, 7th and 8th, 1909. On this occasion the best scientific speakers will be engaged to give free lectures and demonstrations illustrating the most advanced methods and appliances for controlling diseases of fruit and shade trees, together with general topics pertinent to the welfare and development of these interests. Any subject affecting real needs will be given special attention upon a request being made to the Secretary, Mr. Walter Whately, Crozet, Va., in time for him to arrange for the proper handling when drawing up the programme. The exhibit to be held on this occasion will be sent on to at least two Northern cities for exhibition probably Washington and New York. The experience of the Society in this line last year when a selection of the magnificent display collected for exhibit at the annual meeting held at Staunton was sent to Washington and exhibited in the large department store of Messrs. Woodward & Lothrop until Christmas, this fact

being advertised in all the city papers and free inspection solicited, was very satisfactory, and at the close of the exhibit the apples were given away to the visitors to advertise the superior quality of the Virginia fruit. The Secretary is now preparing a letter to be sent to all members of the Society soliciting selection of exhibits for these occasions, and giving details of arrangements. The management of the State Fair have heartily welcomed the Society's proposal to co-operate with them on the above lines, and arrangements for same are progressing in a most encouraging manner.

The Society hopes to give the visitors at the Fairs a splendid object lesson of the fine quality of our fruit. The feeling of the Executive Committee was most strongly expressed that the Society should use the money appropriated to the best advantage for promotion of the Horticultural interests of the State, and this they are determined to do. Further arrangements in this direction will be made later.

In connection with the exhibits to be made at the State and other Fairs which, as above stated, are not to be made in competition for the premiums offered by the Fair Associations the Horticultural Society offers to pay to all members of the Society who will help to uphold the credit of the Society by their co-operation in these exhibits a premium of \$2.00 for the best and \$1.00 for the second best plate of every variety of apples whenever two or more plates are shown in competition. In addition express and storage charges will be paid. The Fair Associations have offered to furnish plates and space required. This exhibit will be assembled at Lynchburg and Richmond and then be forwarded to the other points. Any package of fruit should have enclosed a card which can be obtained from me and should be addressed to the care of the Hon. G. E. Murrell, Lynchburg, Va., and be sent at any time the fruit can be selected to arrive there not later than September 25th. Anything shipped after that date and to arrive up to October 1st should be sent to care of W. T. Hood, Old Dominion Nurseries, Richmond, Va. Send anything worth showing at any time when ready, either apples, pears, peaches, plums or other fruits or vegetables. A card notifying the gentleman to whom consigned should be sent at the same time so that he can put the exhibit in cold storage. Exhibits sent earlier that require cold storage may be addressed as above but adding care of Diamond Ice and Store Co., Lynchburg, or Merchants' Cold Storage, Richmond.

Five apples or other fruit constitute a plate and each variety must be identified by name of variety and of exhibitor with his address. Each specimen should be wrapped, newspaper will do for this, and care used in packing to prevent bruising. Parties having fruit not available for early shipment, and who are attending these Fairs in person may bring it with them to the Fair grounds up to the time of opening of exhibit.

WALTER WHATELY, Secy.-Treas.,
Va. State Horticultural Society.

Crozet, Va.

DWARFING TREES.

The apple is dwarfed by grafting upon small growing types of apple trees, such as the Paradise and Dudin

stocks. The latter is the better, making a stronger tree. The pear is dwarfed by growing on the roots of a quince. Dwarf apple and pear trees may be planted as near as ten feet apart each way. A dwarf apple or pear tree should be kept at the height of ten or twelve feet, and should not attain this stature in less than ten or twelve years. A dwarf apple tree in full bearing should average from two pecks to a bushel of first quality apples.—Market Growers' Journal.

It is always well to remember that in the fertilization of garden crops the element nitrogen has mainly the effect of increasing the luxuriance of the growth and foliage, and that phosphoric acid and potash are the plant foods that are mainly concerned in the storing of foods in seeds, roots and tubers. Hence, with crops like cabbages, etc. that are grown for the foliage mainly, nitrogen is the most important element, while those that make the crop under ground, or in the seeds, demand larger supplies of the mineral elements than of nitrogen especially.

Potatoes, both Irish and sweet, store large amounts of starch in the tubers and roots, and hence need heavier applications of phosphoric acid and potash than cabbages, lettuce and spinach.—W. F. Massey, Market Growers Journal.

"

ORNAMENTAL SHRUBS.

I have somewhat against the printer and proof reader for my manuscript of reply to Mrs. Gould Page 612 was typewritten and should have been plain. I like to be exact in regard to botanical names and do not like to see "Azalea pontiac" when I wrote "Pontica"; "Pleagnus" when I wrote "Eleagnus,,," and if I told the inquirer that the P. J. Berckmans Co was at Atlanta, it was certainly an error, for their nursery is at Augusta, Ga.

W. F. MASSEY.

Referring to the errors in the names of the shrubs referred to, these errors were corrected by the proof-reader, but, unfortunately, the printers overlooked the corrections. As to growers of these ornamental plants, our old-time advertisers and friends, the Franklin Dav's Nursery Co., of Baltimore, Md., write us that they make a specialty of growing this class of plants and have always stock on hand. The reputation of this firm for supplying good stock is well known.—Ed.

The growth of a number of successive crops of the same plant has been lately found not only to exhaust the soil for that plant, but to develop an active poison for it. Steam distillation of a wheat-sick soil yielded a crystalline substance that is poisonous to wheat and from a soil exhausted for cowpeas, a crystalline substance was obtained that is poisonous to cowpeas but not to wheat.

The millions of people trying to make both ends meet will be interested to know that figures on wholesale prices of 258 representative staple articles reached the highest mark during last October. These figures are for the eighteen years between 1899 and 1907.

Live Stock and Dairy.

FEEDING CORN AND BY-PRODUCTS.

Introduction.

Editor Southern Planter:

Corn, the greatest of all cereals, can be grown in every section of the country with more or less success, and furnishes, with its by-products, a higher per cent. of the feed used for the maintenance of live-stock than any other single crop grown on the American farm. The true relation of the corn plant to our industrial progress cannot be accurately estimated, but it is not stating the question too broadly to say that without it our splendid success in the fields of livestock husbandry, for which America is so justly celebrated, could ever have been attained. A crop that bears such a definite relation to the success of the most important industry in which our farmers are engaged is worthy of the closest attention, and though we have been studying this crop for many years, we are still unfamiliar with many of the uses to which it will eventually be put, and we understand comparatively little about how to manage and feed it so as to insure the largest profit to the farmer.

Experimental data have accumulated to show that a very considerable per cent., possibly as much as one-third of the nutritive value of the corn crop is lost through a misapprehension of how to feed it so as to obtain the largest returns from a given consumption of grain and fodder. In addition, at least fifteen to twenty-five per cent. of the total nutrients in the stover are lost each year during the process of curing. A much superior quality of stover could ordinarily be obtained if its true value were more generally understood. Early cutting, careful shocking, and better handling, so as to prevent the great waste of leaves commonly observed, would improve both the palatability and food value of the stover. The fact that the 94,916,911 acres of corn grown in 1899 would yield almost two tons of fodder per acre should not be lost sight of, as this was much more rough feed than all the animals kept on farms in the United States would need for their winter maintenance. In Virginia the area devoted to corn in 1899 was 1,910,085 acres. A yield of only one and a quarter tons per acre of stover would provide 2,388,606 tons of feed, which if only half as valuable for the maintenance of ruminating animals would still exceed the feeding value of the hay crop of that year which approximated 943,079 tons. If the stover yielded by the corn crop were carefully preserved and fed, it would provide all the roughness needed by the 1,563,045 head of horses, cattle and sheep in the State for more than 180 days.

What a tremendous addition to our resources it would make if the full potential nutritive power of the corn plant were obtained on our farms. But does this suggestion smack of a Utopian ideal which we can never hope to reach? Not at all, because the intelligence of the American farmer is developing apace, and the time is not far distant when many exceedingly wasteful forms of practice which now find favor will pass into disuse. On thousands of farms corn stover is never harvested.

In some cases some of the leaves are pulled off, but in many the entire stalk is abandoned to be washed away by the freshets or burned up to destroy what is frequently deemed a nuisance. A ton of corn stover contains about sixteen pounds of nitrogen, five pounds of phosphoric acid and twenty-five pounds of potash. The burning this dissipates about \$5.12 worth of nitrogen at present prices for commercial plant food, estimating the yield of corn fodder at two tons per acre. The wanton wastefulness of this practice accounts in many instances for the rapid deterioration in soil fertility.

Corn stover or corn fodder properly preserved and utilized may be made to take the place under most conditions of timothy hay, a much more expensive crop to grow, one that can only be raised successfully in certain sections of the country, and one that has a very high money value, finding a ready sale in any of our leading markets. The utilization of corn stover and fodder would thus frequently revolutionize conditions on many farms, and make possible the maintenance of large numbers of live-stock where conditions seem unfavorable to this business, and where, unfortunately the owner has frequently concluded that the old methods of clean culture which have brought him to the verge of starvation and increased the mortgage on his farm from year to year is the only policy he can pursue. Is there not need, therefore, for the agitation and dissemination of all the useful facts concerning this important crop through the length and breadth of this country.

To properly discuss the utilization of the corn crop for all classes of live-stock on the farm is an exceedingly difficult task, because there are so many viewpoints from which it may be considered, and which in fact, may be regarded as essentials to the intelligent discussion of this question owing to the great variety of uses to which the crop can be put, and the equally great variety of forms in which it can be utilized. An endeavor will be made to discuss it from the standpoint of a roughness and a concentrate when utilized singly and in combination with the other fodder and forage crops generally available on our farms.

Corn Fodder.

The corn plant may be used in the form of fodder or stover. By fodder is meant the stalk, ears and all; by stover is meant the stalk and leaves without the ears. Fodder may be fed whole or cut and shredded, and stover in the same manner. As a rule, fodder corn is obtained by drilling the crop in very thickly in rows from three to four feet apart. Sometimes the crop is broadcasted, but when drilled in it can be cut with a corn harvester and bound in sheaves and set up and cured to much better advantage than where broadcasted. The effect of seeding corn for fodder at different distances was brought out in an experiment made at Blacksburg, Va., where corn sowed in drills 39.6 inches apart and 4.6 and 8 inches apart in the drills so as to leave 20,000 and 30,000, and 40,000 stalks per acre proved that the largest yield was made from the 20,000 stalks, the average being 3.99 tons per acre.

Observe that the largest yield was made by planting eight inches apart in the drill row. Three-fourths of the stalks on this plat developed medium sized ears, but the other lots were deficient in this respect.

Over 6,000 pounds of digestible dry matter have been secured from an acre of land planted in corn, and it is doubtful if any other farm crop has ever equalled this record. Of course, where corn is planted thickly, the number of well developed ears obtained is materially reduced. Still, experimental data show that in spite of this fact, a considerably larger amount of nutrients will be obtained from thick planting than from thinner planting where conditions favor the development of larger ears. Then, fodder can be utilized for feeding whole on the sod in the winter most advantageously, and the animals find little difficulty in consuming the ears which are not so large and hard to masticate as those developed on corn planted at greater distances in the drill row. As corn fodder will provide more than a maintenance ration if intelligently fed to cattle running out of doors, even at the high elevations prevailing in the Appalachian region, it is a crop that should be utilized far more extensively than is found to be the case in practice, for it would materially economize the labor of feeding and maintaining cattle through the winter which are to be finished on grass the next summer.

Corn fodder may be fed green or in the cured form. When fed green it is generally utilized as a soiling crop, for corn can rarely, if ever, be pastured successfully, and certainly not without a tremendous amount of waste. Corn fodder, however, can be had throughout the growing season by sowing selected varieties of corn which will mature in a regular succession, and supplement, and in some instances take the place of tame pastures, especially in seasons of drought. It is a crop, therefore, that should receive consideration on every stock farm where pastures are likely to be short during the summer season. Fodder corn when used as a soiling crop should not be cut until the ears begin to glaze, for it has been conclusively shown that the dry matter increases very rapidly as corn approaches maturity. For instance, it was found at the New York State station that corn which had tasseled on July 30th contained only 1,619 pounds of dry matter, but that when glazed on September 6th, 7,202 pounds of dry matter had been formed, and when ripe on September 28th, 7,918 pounds. Dissatisfaction with using corn as a soiling crop is probably attributable in a large measure to the fact that it is frequently cut too early.

Corn fodder may be fed either whole or cut. For dairy cows it will probably pay to cut it and mix some grain with it. When thickly sown, so as to keep stalks comparatively fine, cattle will eat most of it readily. The distribution of the nutrients in the corn plant is such, however, that every reasonable effort should be made to have the entire stalk consumed, for while twenty-seven per cent. of the total digestible matter is found above the ear, thirteen per cent. in the blades below the ear, twenty-six per cent. in the husks, there still remains thirty-four per cent. in the stalks.

ANDREW M. SOULE.

Georgia Agricultural College

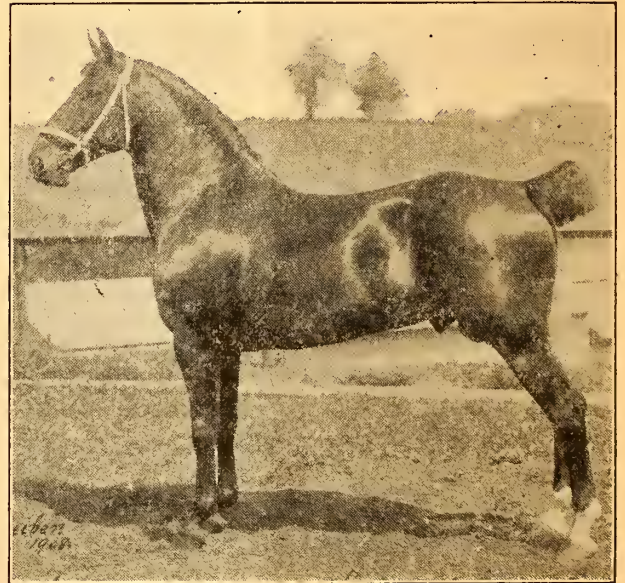
(To be Continued.)

NOTED VIRGINIA BREEDING ESTABLISHMENTS.

Editor Southern Planter:

"Oak Hill."

To one alive to the beauties of nature and the advantages and delights of farm life, opportunities of visiting the many excellent farms and palatial homes in Virginia are delightful in the extreme. Many of these homes are notably historic, not the least important of which is that of "Oak Hill," owned by Hon. Henry Fairfax, Aldie, Va. The establishment of this delightful old home with its broad acres occurred at the time of the inauguration of President Monroe in 1817. The place was inherited by Mr. Monroe from his uncle, a bachelor by the name of Jones. The house, almost as it now stands, was completed in 1820, and was the delight and pride of President Monroe during his two terms as President of the United States. Many noted personages, among them Lafayette, were entertained lavishly at this palatial country residence.

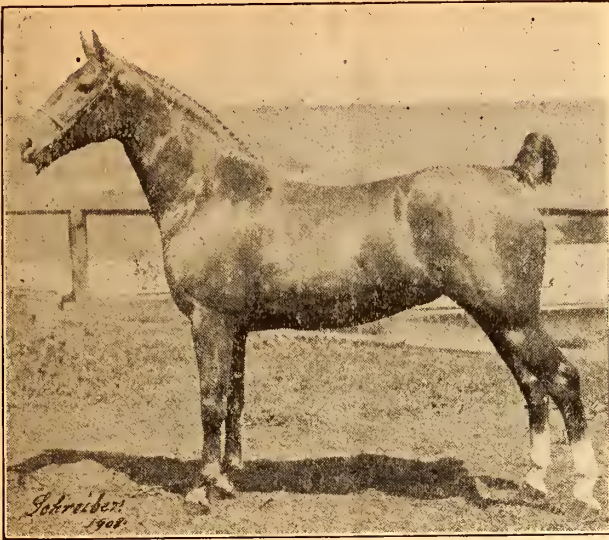


"Baythorp Sutton"—Imported Hackney Stallion, owned by Hon. Henry Fairfax, Aldie, Va.

Mr. Fairfax, the present owner, is a fancier and breeder of one of the best classes of horses in the world, namely, the Hackneys. His noted horse Matchless is well known, not only throughout the United States, but abroad. He has been a great prize winner, and was champion across the water. At the time of his purchase Mr. Fairfax also secured three prize-winning mares, with which the nucleus of the finest stud of Hackneys in the United States was formed. Mr. Fairfax keeps constantly on hand from 150 to 200 head of horses and a fine flock of Shropshire sheep.

While at Leesburg it was the pleasure of the writer to visit this historic spot and the home of Mr. Fairfax, to receive at the hands of himself, his attractive wife, and

lovely daughter most hospitable entertainment, and to have the pleasure of seeing the splendid Hackneys exer-



"Lively Buskin"—Imported Hackney Mare, owned by Hon. Henry Fairfax, Aldie, Va.

cised. The beauty of Oak Hill estate surpasses description. Mr. Fairfax has added about 400 acres to its area and has greatly improved the surroundings.

Morven Park Estate.

This grand old colonial plantation is owned by Westmoreland Davis, Esq., and located also in Loudoun County, near Leesburg. Mr. Davis is a most entertaining host, and has the wherewithal to entertain in his magnificent country palace, for it is little less. To one interested in blooded stock, the further entertainment which Mr. Davis is enabled to extend may be continued days with the proper study of the Guernseys, Percherons, Dorset sheep, Yorkshire hogs, and their very excellent accommodations, both in buildings and conveniently arranged paddocks. The Guernseys number about 200 head

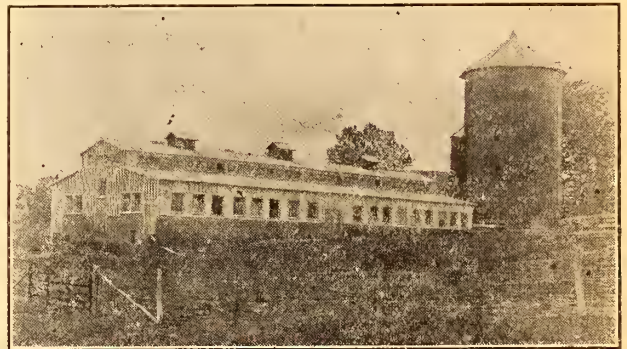


Imported Frances Jewell VIII, a prominent sire in the Morven Park Jersey Herd.

and may safely be said to be the largest herd of pure-

bred Guernseys in the United States. It may be further added, without the possibility of contradiction, that for imported and advanced registry animals it is second to none. The beautiful groups of "milk and cider" cows, with their great "commissary departments," could hardly be found of better quality on their native heath in the Guernsey Isle. This magnificent herd is headed by two great bulls, Imported Top Notch and Imported France's Jewel VIII. An illustration of the former appeared in your pages some months ago, and it is to be regretted that we were unable to secure a photograph of the latter only as a ten months calf. It is, however, important to note that we did secure (which fact we trust will be remembered by his get in the future) a magnificent yearling Guernsey, Morven's Leading Lad, to head the V. P. I. herd of Guernsey cows. This youngster has been received at the V. P. I. Farms, is doing splendidly, and has already indicated his ability to serve the purpose for which he was secured. This young bull is of the noted May Rose family; his sire is Imported Top Notch, bred by Sir Henry Tichbourne and out of the celebrated Itchen Beda that took first prize at the English Royal, as did also her daughter. Upon being imported to America, she entered the Advanced Registry with a record of over 10,000 lbs. of milk and 640.15 lbs. of butter. Almost as much can be said of the dam of the V. P. I. selection. She is Morven's May Rose, is in the Advanced Registry, as is also her dam, grand dam, and one sister. There is no more fashionable blood in the Guernsey world than the May Rose family. There are other important families represented at Morven Park, such as La France, Princess, Masher, Glenwood, Selects, and others.

The cattle barns are one of the principal prides of Mr. Davis. All his recent buildings are strictly up-to-date; the best of silos are in evidence, and concrete with plenty



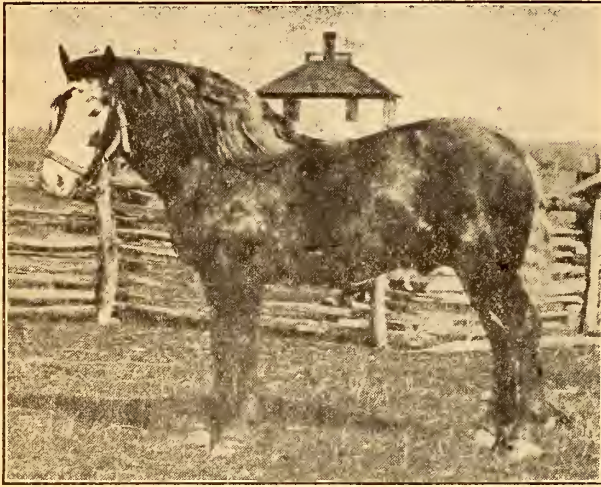
One of the Cattle Barns and Silo on the Morven Park Estate.

of glazing has been used wherever possible to the advantage of the dairy barns. His arrangements for carrying off the liquid manure into cisterns by gravity and when desired into tanks, with which to moisten the dry manure in the manure spreaders, are most convenient, the cisterns even being emptied of their contents by gravity. We take pleasure in handing you herewith an illustration of one of the barns, which accommodates 50 head of cattle.

The cream is shipped from the dairy by express, prin-

cipally to New York and Washington. The skim milk is fed to pigs and calves. It is worthy of note that the milk is sterilized by live steam, notwithstanding the fact that the herd is kept absolutely free of tuberculosis and is tested regularly by the Bureau of Animal Industry, Department of Agriculture.

The Percherons at Morven Park were all, with the exception of a few colts, selected and imported from France by Mr. Davis. They are as a whole, very cleanly made,



"Vibraye"—Imported Percheron Stallion, at the head of Morven Park Percheron Stud.

have large bone, show splendid quality and action, and while they are perhaps not quite as large as some Percherons, their quality is exceptionally good. They are especially free from that inactivity often seen in the extra large Percheron horses. Among the mares are several prize winners in France. We were particularly pleased to note that these mares were all earning their board, demonstrating the fact that they are not only valuable for raising colts, as was evidenced by the sucklings and weanlings on the place, but that they were valuable to the plow or wagon. At the head of the Percheron stud is a young imported stallion of excellent quality, by the name Vibraye, a Government Premium stallion of France. This horse is rich in the celebrated Brilliant blood, as are nearly all of the mares, though they are not closely related to him. The sire of Vibraye was Besique, several times champion of all France.

The Morven Dorset flock consists of about 100 imported ewes and their immediate offspring. They are as fine as the finest, and the flock is regularly kept up to date by purchases from Mr. Flower and other eminent English breeders. Very few females have thus far been sold from the Morven flock, but flock headers for pure-bred flocks, as well as for the improvement of common grade flocks, are sent not only all over the State of Virginia, but to many other states. Mr. Davis claims that there is no other breed equalling the Dorsets for early lambs. One of the Morven-bred Dorset rams has been secured for use in the V. P. I. flock next fall, in order to avoid inbreeding. Herewith we present an illustration of

a part of the Morven flock, exhibiting some very typical and uniform Dorset ewes.

The improved Large White Yorkshire is the favorite breed of swine at Morven. This breed is noted for its



Imported Dorsets owned by Westmoreland Davis, Esq., Morven Park Estate.

very large size. A modern piggery is in course of construction and is being built almost entirely of cement. We were pleased to note that the greater part of this herd were running in a 40-acre wood lot, where they were leading perfectly natural lives, and every evidence indicated that they were in the best of health. One of the herd boars about two years of age will certainly weigh not far from 1,000 lbs., and sows weighing from 500 to 750 were in evidence. In order to represent to the students this fine breed of bacon swine, Mr. Davis has very kindly made a donation of a trio of White Yorkshires to the Virginia Polytechnic Institute.

To any visitor at Morven Park its success seems most evident. The estate consists of Morven Park proper and Big Spring Farm, of 1100 acres and 500 acres respectively. All of the operations of the farm are conducted, with the aid of skilled employes, by Mr. Davis, who is almost constantly going about over the splendid estate carefully studying its conditions and everything to the advantage of his much loved live stock. Much of his success is doubtless due to the fact that he believes in developing his animals under the most natural conditions. They are not crowded and pampered, but are kept in a good thrifty condition of flesh.

Through the kindness of Mr. Davis, the writer was given the pleasure of a drive and visit to

Selma Estate.

the beautiful and picturesque home of Mr. and Mrs. E. B. White. While the Selma mansion is of up-to-date internal construction, having been built by Mr. White, it is none the less attractive and has the colonial pillars and general appearance of one of the old mansions of Virginia. The surroundings are most magnificent and palatial. The spacious halls, drawing rooms, and other attractions in the way of internal furnishing are most artistic and interesting. The estate consists of about 1,000 acres, and was formerly the home of Senator Mason, who lived there at the time of the Mason-McCarthy duel. Mr. White is President of the Peoples National Bank of Leesburg, but lives

at this country place, which is about four miles from town. His live stock interest is almost exclusively in Percheron horses, of which breed he certainly has some of the best it has ever been our pleasure to see. They are magnificent and one of the largest collections of Percheron horses in the State of Virginia. We were especially attracted by a family of mares and colts representing the very noted Brilliant blood; in fact, two of the mares were grand-daughters of old Brilliant. One of them won the grand championship at St. Louis and the other the junior championship, while the colt of one of these mares won first in his class. The Brilliant blood is the most celebrated in France, and has proven to be the most potent in the production of size, quality and stamina, for all of which Mr. White's horses are of such note as to have won many of the leading prizes in our own state, at St. Louis, and at the International at Chicago. Mr. White owns the champion mare of France, the second and third prize winners at Paris, and the second, third and fourth prize winners at Nogent, France, last year. We have mentioned his winnings at the International last year, when the writer was present and saw his horses on exhibition. A grander lot were not in evidence from any State. At the International in 1906, Mr. White's horse Sam stood next to Pink, the International winner. He has also exhibited his horses at other State fairs than that of Virginia with marked success.

Mr. White does not interest himself particularly in any other pure-bred breeds of live stock, except a small herd of Shorthorn cattle, but he does take a very great deal of interest in conducting his farm in the most scientific and up-to-date manner. His buildings and fences are all good, and one can see on his place a most magnificent apple orchard consisting of about 4,000 trees that are just now in bearing. These trees were just in the proper spring condition to be very attractive when we visited the place, and Mr. White had but recently been offered \$5,000 net for the crop this year.

The rolling contour of hill and dale seen on this beautiful place, with its broad bluegrass pastures, makes it most attractive.

Hygeia Holstein Herd.

Among the farms and herds visited there was none of greater interest than that of Dr. W. F. Carter at Crozet, Albemarle County. This herd, it will be remembered, was secured entire from Dr. S. A. Robinson of Coveseville, and is unquestionably one of the leading Holstein-Friesian herds of the United States. The Jessie Veeman family is one of the most noted in existence for both milk and butter production, and, as well, splendid individuality. The wonderful success of this herd in the show ring while owned by Dr. Robinson is well remembered, and extends to winnings in several states other than Virginia. At the farm the herd is under the general management of W. F. Carter, Jr., the very apt and able business son of Dr. Carter, with Mr. J. B. Loomis as superintendent. The herd is being handled on a new farm recently secured by the Carters at Crozet, and its prospects are splendid. The house and buildings in connection are up-to-date and in good condition. A new barn and silo are other features the condition of which both as to building and sanitation, is admirable. More buildings, pastures, and paddocks will

be rapidly added as the development of the place progresses.

The President of the Virginia Polytechnic Institute, who takes a great interest in the dairy herds at the Institution, purchased from the Hygeia Herd a magnificent young bull, Hygeia Veeman Butter Boy, sired by De Kol 2d's Butter Boy 3d and out of the most noted cow of the leading family of the herd, Jessie Veeman A. The records of Butter Boy's ancestors are exceptional, and the tabulation of his pedigree must be seen to be appreciated. Mr. Loomis of the Hygeia establishment had a very excellent write-up of this young bull in the June issue of *The Southern Planter*. This youngster comes to the V. P. I. to head a very excellent collection of Holstein-Friesian cows and heifers, and will likely be heard from in the future.

Bowmont Farms.

The splendid Jersey breeding establishment of Hon. A. M. Bowman is located at Salem, Va. The writer lately had the pleasure of visiting this place and looking very carefully over the herd in company with the genial Colonel, than whom no one can give light on the beautiful form and many advantages of the Jersey with greater genuine enthusiasm. His farms are located in close proximity to Salem, and are overlooked by the N. & W. Railway and depot. The attention of many a traveller has been called to this place, its barns and silos, with hundreds of acres of fruit trees on the hillside slopes surrounding. The pastures are broad, abundant and beautiful. As we drove into the barn yards the Jersey herd was just coming in from the pastures, and we had the pleasure of watching them drive by as Colonel Bowman gave the breeding and history of many of the matrons of the herd. After the cows had reached their proper places in the numerous stables we then made a further inspection. We started with the babies, about twenty of which ranged in age from one to three or four months. Each individual was tied in his own little stall, properly bedded, where it received the attention of the herdsman immediately in charge. The uniformity of these little things was most evident. Nearly all were the get of the noted head of the herd, Imported Eminent, that cost the Colonel \$10,000. In another barn we saw eleven older heifer calves, all dropped since January 1st and all by Eminent but one. Again our attention was called to the splendid uniformity of color and conformation. In a pasture near by a baker's dozen of yearling heifers, with the ever-present and attractive uniformity, especially in eleven of the number sired by Eminent, were shown us, and we could but pass the comment of what an attractive nucleus these would make for the establishment of a herd of pure-bred Jerseys. We learn that there are about 140 head in the herd, 60 of which are milking. A very large number of the cows are by Imported Eminent; others are quite closely related, being sisters or half sisters, cows that have been imported by Colonel Bowman at long figures. In speaking of the prices of the important cows of the herd, we were inspecting a small stable of ten cows, seven of which had been purchased. Our interest caused us to seek out the cost of these animals, which ranged from \$500 to \$3,700 each, the average cost being \$1,268. One of these cows, Imported Bell of St. Savior, had a published milk record on

the Island of 47.5 pounds daily average, and 14 pounds, 4 ounces, of butter in seven days. To our mind the most handsome bull on the place was Eminent's Golden Lad III, a bull with great quality, fine character, splendid color, head and horn, and showing a very desirable disposition. He is not, as the name would indicate, a son of Eminent, but carries some lines of the Eminent blood, so related that breeding with Eminent's daughters will be desirable, when the type of the animal is satisfactory to the Colonel. Sensational Fern, a magnificent two-year-old bull costing \$10,200 and a fine fellow in every particular, will, however, be used most extensively on Imported Eminent's daughters. He was selected by Colonel Bowman and purchased for this express purpose.

It will be noted that no expense has been spared in making this one of the finest herds of Jerseys in the world. The average price of a number of imported young cows was made, the prices ranging from \$500 to \$2,600 and the average being \$1,070. At the great sales of T. S. Cooper & Son, Pennsylvania, and A. P. Walker, Rushville, Ind., for the past eight years, Colonel Bowman has been the leading buyer. Notwithstanding all the recent purchases and the up-to-date cows and their produce on the Bowmont Farms the owner does not forget the valuable old matrons of the herd. It was with real affection that the Colonel patted old "Fontaine" and stroked her head. We moved on as we were conversing, but she followed up for more caresses, when the Colonel said: "This old lady cost me \$1,035 at nine years of age; at the same sale her daughter sold for \$1,400. She is fourteen years old now, but is soon due to add another to the herd by Imported Eminent." Directing our attention to a paddock across the way, he said: "There is Lady Letty Lambert, recognized as the best Jersey cow living; she is also about fifteen years old and one of my pets. She is due by Eminent in only a few days."

We cannot close this account of the Bowmont Jerseys without stating that the V. P. I. herd is now headed by Eminent III, just two years old, by Imported Eminent,

though not nearly developed, we present herewith a picture taken of him on his arrival the past spring.

While Colonel Bowman has made a most wonderful success of Jersey breeding, he has also made a splendid success in conducting his farms on good scientific principles.

W. J. QUICK.

Dean and Professor of Animal Husbandry.
Ag'l Exp. Station, Blacksburg, Va.

HOW A SOUTHERN DAIRY CLEARED \$3,000 IN NINE MONTHS.

Dairy Herd of the North Carolina A. & M. College Makes This Record Without Pasture. Noteworthy showing of Dairying Possibilities in the South.

To show what the Southern States have to offer along dairy lines, we present herewith a report of our college dairy herd, which consists of two pure-bred Jersey bulls and forty-one Jersey cows, all but six of which are grades. The report covers a period of nine months, during which the average number of cows milked was thirty-eight. Following is a statement of receipts and expenditures:

Receipts.	
Cash	\$5,359 00
Eleven calves.....	175 00
Estimated value of manure.....	880 00
Total	\$6,414 00
Expenditures.	
Concentrates	\$1,546 00
Two hundred and fifty tons corn silage.....	500 00
Twenty-five tons corn stover.....	150 00
Two tons peavine hay.....	20 00
Labor	945 00
Ice	110 00
Estimated cost of fuel.....	90 00
Sundries	48 00
Total	\$3,409 00

Balance in favor of dairy is..... \$3,005 00
Milk was sold in bulk at 25 cents per gallon; cream testing 20 per cent., at \$1.00 per gallon; butter at 35 cents per pound; and buttermilk at 15 cents per gallon. Most of the products were sold as milk and cream.

The cows received no pasturage whatever, which increased the expense for feed.

While only a nine months' record is presented here, these were by no means exceptional months. Indeed, we feel confident from present indications that the net earnings for the balance of the year will average higher than those for the period given here.

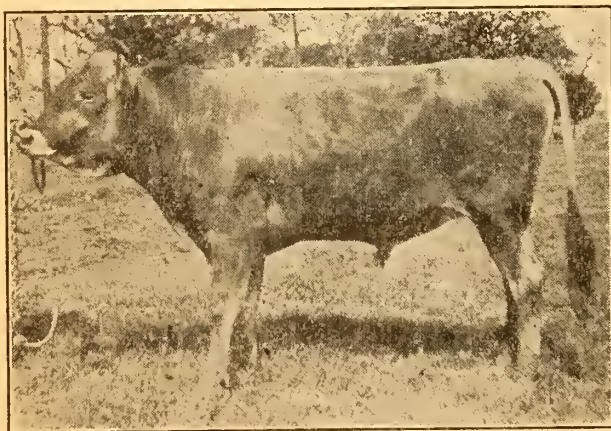
There is an unlimited market for dairy products in this State at the price quoted above, especially for milk and cream. Milk retails at from eight cents to fifteen cents per quart, with an average of fully ten cents per quart.

As to feed, there is no question whatever that a cow can be fed more cheaply here than in any of the leading dairy sections of the country.

JOHN MICHELS.

N. C. A. & M. College. In Progressive Farmer.

Will not some of our Virginia dairies let us have reports similar to this and thus show the country that we can do at least as well as our sister Southern State.—Ed.



Eminent III—Sired by the great Eminent and sold by Bowmont Farms to head the V. P. I. Jersey Herd.

and with many Eminent dairy ancestors all along the line of breeding for six generations. This young bull was selected by President Barringer, and is one of the special attractions at the V. P. I. He is a good looker, and al-

The Poultry Yard.

POULTRY NOTES.

This month is the most trying one of the year to the poultryman as well as to his flock. The egg yield is low and prices usually are not satisfactory. Young stock is growing and must be fed and cared for without any apparent income. My experience has been that August is the hardest month of the entire twelve on the flock, and unless we give extra care and feed to the hens and young stock this month we will lose time and money in many ways. We must provide plenty of shade, feed early and late, provide clean, fresh water, have some kind of young, tender forage growing for the flock and keep a good supply of dusting material on hand where the hens may dust themselves in a shady place. Lice and mites increase very rapidly during the hot summer months and extra work and watchfulness is necessary to keep these pests in check. Hens require very little corn during hot weather. I feed a wet mash in the morning composed of four parts wheat bran, one part coarse corn meal and one part meat meal. For the noonday feed I prefer oats soaked twenty-four hours, and the evening feed is wheat or wheat screenings. I want my hens to go to roost with a full crop. If they do not eat wheat with a relish I give some oats or corn. My hens are laying well on this ration and are in fine condition. Many of them are beginning to moult. We have about 50 early hatched pullets that will be laying by August 15th, and they are given this same ration. The grove of large trees affords abundant shade and a splendid place to feed and keep a supply of water always accessible. I have part of a field of corn near the house sown to rye, wheat, oats and clover for them and they make good use of it. It pays to sow these grains and clover very thick—five bushels of the grain mixture and half a bushel of crimson clover seed per acre is not too much. Sow a good sized patch of land to buckwheat early this month where the hens can get it as it begins to form grain. Sow turnips and rutabagas for winter use. I prefer them to cabbage.

The best place for a dusting box is under some building or outhouse. We have an old cook room with a floor about two feet from the ground. This building is 16x18 feet square, and we throw air-slaked lime, woodashes and insect powder under this building occasionally and the hens have an ideal dusting place there for summer use, cool and rather dark. Go over the roost poles, nest boxes and interior of houses with a fine spray of kerosene oil and crude carbolic acid, three parts oil to one of acid once every week during this month and next and very few mites will be found. Many people will say "This is too much trouble." It is no more trouble, no more work to keep a hen house clean and sanitary than it is to keep a horse stable, a cow stable, or a pig sty clean and healthful, yet we do this kind of work every day. We build good stables, silos, yards and fences for our cattle and spend large sums of money for machinery and equipment to raise hay, grain and silage for our live stock. We buy wind wheels, rams and engines to pump water for them, cut and grind their feed, groom their glossy coats

in health and nurse them when sick or ailing but the hens may roost in the trees or any old place, their houses are not cleaned more than once a year and only then because we want the manure; they must forage for their feed and steal a few kernels of corn from the mules and pigs; get out early enough in the morning to sip the dew for their drink; they are "shooed" away from every growing crop, clubbed out of the garden, stoned away from the mule stable and the pig pens, and have their heads cut off with a dull hatchet when they are sick and then their owner will shriek to you at the top of his voice, "Chickens don't pay!" Of course not.

Here is another view. This same man is ready to go to market or the store and his wife informs him that they must have some coffee, sugar, tea, soap, a couple of sacks of flour, starch, oil, lamp, wicks, matches, etc., etc. Listen! Hear him: "Great Dane Amo woman! How am I to get all of that stuff. Have you any eggs to send?" "Yes, darling, I have twenty dozen and they are worth 20 cents per dozen now, and you will have money enough to get all that I need for the family, and you had better get a quarter's worth of tobacco for yourself." Did you ever hear such a conversation? Honest now, did you? Did you never borrowed any of your wife's egg money? Did you?

Here is another picture. It is Sunday morning. One of the children comes rushing in and breathlessly exclaims, "Oh, mama, there comes a whole buggy load of company." Sure enough there they come. After the customary hand shaking and how-de-does, the team is put away and the guests escorted to the parlor. After a few moments of conversation the good wife excuses herself as she must "see about dinner." What shall it be? Chicken of course. Roast chicken. A good fat hen is decapitated, dressed and roasted and the company is given a dinner fit for a king. "He that bringeth relief in the hour of need is thy best friend," but this friend had been stoned and kicked and cussed all summer. How very often we fail to see or realize the good in our friends until after they are dead. Did you ever gaze on this picture? Honest now, was that hen worth what she cost you? Did that basket of eggs cost you \$4.00? Could you have sold the bugs, grubs, insects, grass, the few grains of corn and wheat that the hens ate while making that basket of eggs for \$4.00? For half of it? The hens have been acting as scavengers and saving the waste products of the farm and putting them into a cash product in spite of your clubs your kicks and cuss words.

I want to repeat what I have written many times in these notes, viz.: There is no live stock on the farm that pays as large a profit on the capital invested and feed consumed as a flock of good hens, and I challenge any one to prove that this statement is not correct. I have never advocated expensive houses or equipment. I do not believe that fancy points count for profit to the farmer, but I do believe that good, pure-bred stock, clean, cheaply made houses and good care and feed will pay and pay well.

A lady recently sent me a copy of an advertisement

that is going the rounds of many of the cheap "get rich quick" papers. Here is the heading of it: "\$200 in Six Months from 20 Hens." "Two pound broilers in eight weeks." "Chicken feed at 15 cents per bushel." The advertiser will tell you all of these marvelous things for \$1.00. Wonderful, is it not? This looks like an advertisement printed in a leading magazine some years ago. How to clear \$50,000 in one year. Very little capital required. Full instructions for \$5.00. A young man in my employ sent the V. and received a neat card in return on which was printed one line. It read, "Fish for suckers like I do." I do not say that it is impossible for an expert with a well established trade and reputation to make \$200 from 20 hens in six months, but I do say that 99 out of every 100 who will try the scheme will find that if they will have \$20 clear at the end of the six months they will be fortunate. The man who advertises such wonderful discoveries and offers them to you for a single little dollar is making his living from the credulity of the public and not from hens and the man who sells him advertising space is helping him to rob you. Every fair, honest and legitimate business should and does yield a fair profit and anything that promises more than this is questionable and should be left severely alone.

CAL HUSSELMAN.

GETTING THE BEST PRICES.

Editor Southern Planter:

Shipments have begun to arrive in Washington under the blue label of The Southern Table-Poultry Club, and we are glad to report that thus far these consignments have been of a quality which brought top market prices.

My first sale under the blue label was made July 20th, when ten of our large strain of Barred Plymouth Rock hens, ranging from two to five years old were taken directly from the laying flock and delivered to the commission merchant by wagon. They were sold within half an hour at 13½ cents per pound, and the ten hens weighed seventy-four pounds, or within one pound of full standard exhibition weight for the entire lot. They would have put much more than a pound in their crops if given an opportunity. The selling price was, therefore, \$9.99 for the ten hens, taken near the end of the laying season, when we had worked off all the winter fat that we could, and when two of the hens had begun moulting, and starting new feathers abundantly. These hens brought a half cent per pound above any others sold that day, so far as I could learn.

This same lot of hens weighed between eighty and eighty-five pounds last winter, and would have fattened up to the same weight next fall, but no one could afford to keep them through the moult on grain at present prices for the increased weight, and then probably sell at lower rates per pound.

Let me again urge every practical reader not to let any hen grow a new winter coat at his expense unless he intends to keep her all winter. "Sell your surplus hens before they shed" is one of the watchwords of true economy in management.

Sales of Breeding Stock.

The beginner in pure-bred poultry is liable to overesti-

mate the amount of business he can do in selling for breeding purposes. Extensive advertising will help, but it will also eat into the profits. The number any one man can sell among his neighbors is also limited. We have been in this business in a small way for over thirty years, breeding nothing but Barred Rocks of a large, rugged, practical strain. We have not advertised widely, but we have an increasing number of well-pleased customers scattered through several States, and yet I do not count upon selling more than forty or fifty cockerels per year for breeding purposes. I frequently have orders or inquiries for pullets by the dozen which I cannot fill. We are already shipping young birds on early orders, and intend to keep the number down by rapid sales. All but the best go to market.

It is evident, therefore, that when we began this season to increase our flock to the limit of profit, we expected to put the greater part of our product on the market for table purposes. If there is no profit in this, then we have little ground for urging the average farmer to buy and raise better stock.

At present we have about 750 chicks, all hatched on or since April 18th, and are still setting all the eggs we get from our diminished flock of hens. The fertility and hatchability continue good, but we are having one of the worst droughts ever known, so early in summer, and there is hardly any vegetation which a little chick can eat. Mine at the one-pound size, are digging and eating new potatoes.

I have one pointer on the care of chicks. Make the coops rain-proof. Use wire fronts or doors for ventilation, and keep the bottom covered two inches deep with fine, dry dirt. Then you can brush or scrape the droppings off the dirt once or twice a week and keep a clean coop with a minimum of labor. The chicks will be less liable to crooked breast-bones and leg weakness than if kept on bare board floors, and lice will be much less troublesome.

A correspondent says five drops of sulphuric acid in a pint of water for fifty chicks to drink will almost always cure diarrhoea in little chicks.

W. A. SHERMAN.

Vienna, Va.

ROSE-COMB RHODE ISLAND REDS.

Editor Southern Planter:

Mr. Pleasants writes in the July Planter very enthusiastically about game chickens. Mr. Sherman continues to talk of Barred Plymouth Rocks, and we all know Mr. Husselman's choice.

I beg a little space for my favorite breed, that they may not go unnoticed.

For the last five years I have raised only Rose-Comb Rhode Island Reds, and find them nearer an ideal fowl than any other. Having the beauty and vigor of the game, size of Plymouth Rocks, and laying equally as well as the Leghorns. Indeed, they lay better for me. While I cannot claim a hundred per cent. hatched of all eggs set, as does Mr. Pleasants, I will give results of two lots shipped to different parts of the country:

Fifty-six went out into the mountains of Virginia, over

New River Division of N. & W. R. R., changing cars several times, and driven several miles across the country. Fifty-four hatched and were all living at a month old.

The next lot, forty-nine, went to Southeastern North Carolina. The hen broke two or three, forty-three hatched and forty-two were raised. I think those two will be enough to prove baby Reds are strong.

I hope the grumblers read what Mr. Husselman said about poultry failures.

Misapplied Poultry Knowledge.

Now, I will tell you a true story of why one woman, and a Southside Virginian, too, failed to make the fortune in poultry she thought she would. After reading a great many books and papers on poultry she came to the conclusion it was an easy job. Just guard against vermin, and that was all. She bought sixty fine eggs, and set them under five hens. Three weeks went by and not an egg was pipped; another week and she denounced the man from whom she bought the eggs. A neighbor was condoling with her and listening sympathetically to her tale about the "care she took in setting those eggs; how she had thoroughly greased every egg herself, that when the little chickens came they might not be bothered with lice.

A little melted lard on the top of each little head and under each little throat is all they need for a week or two. *Don't grease the eggs.* Then dust with some insect powder. Give them plenty of fresh water to drink and plenty to eat; a dust bath near, dry sleeping quarters kept whitewashed and the battle is over.

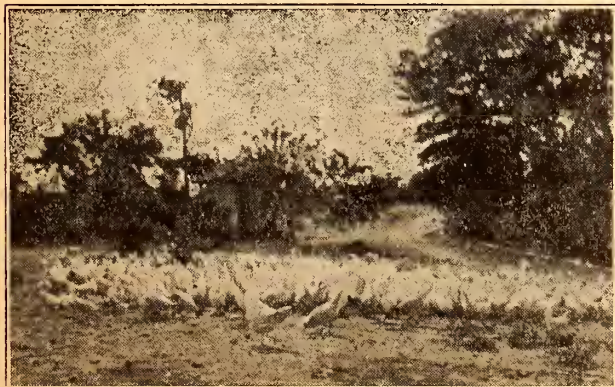
You will not make a fortune, but besides supplying your table with chickens and eggs you will find at the end of the year a nice little sum of money over and above expenses.

Nottoway Co., Va.

MISS L. V. SPENCER.

FIRE INSURANCE OF POULTRY PLANTS.

We have noticed recently the destruction by fire of several poultry plants. It is a point worthy of attention by poultry keepers that in order to maintain a valid claim against an Insurance Company for damages done by fire it is necessary to pay an additional premium where an incubator is run in the buildings. We are informed that an additional premium of 1 per cent for three years is required.—Ed.



1,000 White Leghons at Breakfast at J. W. Howard's, Saxe, Va.

FEEDING THE DAIRY COW.

Our present knowledge of feeding can be boiled down into the following maxims:

The more food the cow can be induced to eat, the more milk she will produce. Cows do not usually consume more food than they can properly digest. The ration, therefore, should be made as palatable as possible in order to induce the cow to eat larger quantities.

The larger the amount of protein in the ration, the larger the milk flow. Protein in the ration is essential to the production of milk.

The less energy required to digest the ration, the larger the milk flow.

The richer the ration, the richer the manure. The dairy farmer must look here for a large part of his profit.

No two cows can be fed alike. Each must be studied differently. Increase the protein in the ration and watch the milk flow.—Prof. C. L. Beach.

FARMER AND PLANTER.

In Mr. Massey's most valuable articles and comments he is always drawing the distinction between "Planter" and "Farmer" (May Planter, p. 423) and very justly so with the meanings he attributes to these words and with the beneficent ends he has in view. But the distinction emphasized was not, even forty years ago, commonly understood as Mr. Massey understands it. This is merely one case in ten thousand for the maker of dictionaries, who find that every change in the conditions of a people's life not only causes new words to be adopted but brings about the attachment of new meanings to old words.

The word "Planter" in our country first took hold in the tobacco regions (where it was literally correct) and from there was extended to the cotton belt. "I plant so many hills" grew into "I am a planter." The man who planted little or no tobacco naturally called himself a farmer. Unfortunately, perhaps, the number of such farmers, successful at their business, was not large enough to make possible the maintenance of parity between the two standards and the terms descriptive of them. It was about 1830, no doubt, that the word "planter" in Virginia began to decline in premium value, the reasons being the same as those that lead Mr. Massey to-day to preach the gospel of "farming."

In his very interesting summary of conditions in Virginia in 1864 (to be found in the report of the U. S. Commission of Agriculture for that year) the Rev. S. M. Janney of Loudoun county, remarks that in the best red land section of Loudoun there are more farmers than planters. His meaning plainly is that in that part of that part of Loudoun there were in 1864 more grain farms than tobacco farms.

The substance of the matter is that farmers, like other practical men, have little use for etymology. But it is just as well to remember what the history of our common words is.

ALFRED L. MORRISON.

Prince Edward Co., Va.

The Horse.

NOTES.

W. J. Carter.
"Broad Rock."

With a bright outlook ahead, the management of the Virginia State Fair Association is putting forth strong efforts to make the forthcoming Fair the greatest yet seen in the Old Dominion. The premium list has been revised, new classes added, and the prizes increased in many instances. General Manager, Mark R. Lloyd, who is also Assistant Secretary of the Association, has cause to feel elated over the generous support accorded his efforts from widely different sections, an evidence of which is the large demand for the new premium list, with the many letters of encouragement from prominent agriculturists and others. A new addition to Manager Lloyd's office force is Cyrus T. Fox, of Reading, Pa., well known in connection with fairs and for the last six years connected in that direction with the Associations at Roanoke, Lynchburg and Radford, which are now members of the Virginia-Carolina Circuit, the latter being made up of different points in our own State and the two Carolinas.

One of the features of the premium list of interest to breeders and horse fanciers in general is the addition of several new classes with added money in others. The speed programme, as prepared by the Race Committee, with J. T. Anderson, as Chairman, is an attractive one and the purses offered will attract some good horses to compete in the different events to be contested. The early closing events for harness attracted a nice list of entries, while the open purses announced will prove a drawing card for others. From two to three harness races are carded for each day, and from three to four for runners. The latter will compete in both races on the flat and over the jumps, as the steeple chase events are always particularly fancied by many, as being rather of the spectacular order. Taken as a whole, the week of October 5-10, the dates of the Virginia State Fair, will be an eventful one in Richmond's history and many thousands will flock to our capital city during that time, as the Mecca of refined sport and numerous festivities.

The Montezuma Stock Farm stable of harness horses were shipped back to Richmond from the Rockport and Canton, Ohio, meetings, after which Norfolk, Va., was the next point. The opening meeting of the Maryland and Virginia Circuit took place at Norfolk during the last week in July, and several of the Montezuma Farm horses started while others will take part in the Tasley meeting now in progress. Samuel E. Earing, who manages the stable, also does the training and driving. Earing made his first start of the season at the Gentlemen's Driving Park, Baltimore, where he finished second in one race with Estuary, and third with Nettie May in another. From Baltimore the stable was shipped to Rockport, Ohio, where Nettie May won a five-heat race and the daughter of Sidney Prince trotted to a new record of 2:22 $\frac{1}{4}$.

Two additions were made in the stable at Cleveland in

the trotters, Gracie W., 2:29 $\frac{1}{4}$, by Blue Victor, son of Jay Bird, and Iron Pilot, the bay gelding by Iron Worker, son of Mambrino King, dam by Guy Wilkes. The latter is a green trotter, with quite a turn of speed, and seems likely to make a very useful horse in the slow classes this season.

Earing will follow the line of the Maryland and Virginia Circuit, and his stable includes Gracie W., Iron Pilot, Classman, Estuary, 2:15 $\frac{1}{4}$; Zack, 2:16 $\frac{1}{2}$; Brooklet Chimes, 2:16 $\frac{1}{4}$, the handsome bay pacing mare that was a close second in heats paced around 2:11 over the half-mile tracks last fall; Nettie May, 2:22 $\frac{1}{4}$; Meda Director, bay mare, 6, by Point Director, dam Meda, 2:24 $\frac{1}{4}$, dam of Bedford Girl, 2:16 $\frac{1}{4}$, by Harold and Kingston, bay gelding, 5, by Clay King, dam by Red Leaf, 2:22 $\frac{1}{4}$, son of C. F. Clay, 2:18.

Presque Isle, 2:29 $\frac{1}{4}$, by Norfolk, 3670, dam Mambrino, by Mambrino King, is now owned by J. E. Wingfield, of Esmont Albemarle county Virginia and some of the best mares in that section have been mated with the big bay stallion. Presque Isle is a horse of grand size, being over 16 hands high and weighing 1250 pounds, with rare manners and a good disposition. Notwithstanding his size, Presque Isle could show a great speed on the trot, as while in training he could brush eighths in 16 seconds—a 2:08 gait. His breeding is stout, too, being by Norfolk, sire of Miss Nelson, 2:11 $\frac{3}{4}$, one of the fastest trotters ever bred in Virginia, while the dam, Mambrino, figures as a great brood mare and was sired by Mambrino King, a prolific sire of speed and one of the handsomest horses ever seen in America. The get of Presque Isle make large, handsome harness horses, while many of them are natural saddlers, with style and finish.

Due to legal enactments so seriously affecting races that prices of thoroughbreds have greatly deteriorated, the yearlings bred by James R. Keene, at his famous Castleton stud, Lexington, Ky., were shipped to England and sold at Newmarket, July 15th, with excellent results. The youngsters were not looking their best either, due to a bad voyage. Nine colts brought an aggregate of \$11,000 and ten fillies \$14,000. Lord Lonsdale, who bought several of these yearlings paid \$3,750, the top price of the sale, for a filly by Disguise II, out of Czarina, and \$1,600 for a filly, by Kingdom, out of Gingham. The twenty head sold for \$25,000, making an average of more than \$1,300.

Virginia bred horses are winning on the Canadian tracks this summer, among the latest to earn brackets being Billie Gibbs, bay gelding, 3, by Fatherless, dam Aurine, by Eolus, who was a stake winner last season as a two-year-old, and the steeple chasers Waterway, bay gelding, 5, by Waterlevel, dam Runaway, by Algerine, and Woodside, chestnut gelding, 4, by Norwood, dam Bell Andrews, by John Happy. Billie Gibbs is a product of the Ellerslie stud, at Charlottesville, while Waterway and Woodside were bred at Esmont, also in Albemarle county, by J. E. Lane.

Essential, the bay mare, by Marvelous, 12210, dam Bertha Red, by Red Wilkes, is making speed in the hands of William Bass, at the State Fair grounds track. Bass worked her a comfortable mile in 2:29, the latter half of which was trotted in better than 1:13 on Tuesday last. Essential was recently purchased by S. B. Nelson from Robert Moffett, Chestertown, Md. She was bred by C. W. Baker, of Aberdeen, Md., and is a full sister to the trotters Marlow, 2:22 $\frac{1}{4}$, and Marvel Girl, 2:23 $\frac{1}{4}$.

THE FARM HORSE PROBLEM.*

Editor Southern Planter:

After reading the articles on the farm horse in the July issue, I am tempted to "put a little oil on the troubled waters," at the same time recognizing that he who takes a middle position is often the common object at which all parties take aim.

In my opinion, all the disputants are correct from their points of view, but seem utterly incapable of grasping that of the other fellow. The truth of the matter is that different sections require different types of horse. I have no doubt that on the limestone lands of Rockingham it is easy to raise 2,000 pounds Percherons, and at that altitude such a horse can do farm work with comfort to himself, and pleasure to the driver, but such a horse it is impossible to grow on the light, sandy lands of the coast region, and if we get one from the western part of the State, he will go away to skin and bone, and finally die on the same feed, and doing the same work that a trotting bred, or half-thoroughbred horse will do all his life, and stay fat in the doing. This is not theory with us here in the Tidewater section. We have seen it tried time and again, and while a Percheron cross adds weight, and makes a desirable animal for our farm work, we find that the half breeds are rather better sires than the thoroughbreds, and in no case do we grow them above 1,200 pounds after the second generation. Nor would the Eastern Shore breeder in that great nursery of speed with his small light mares be wise to patronize a Percheron sire, when he has access to such a horse as Sidney Prince and Bedworth. The people of the low country on both sides of the Chesapeake are natural horsemen, and take to the trotter as they do to the water. This country is level, with good roads in the summer, the farms are small and easily tilled; (one and two-horse farms are in the majority) and they want a horse that will do the work, and to drive on the road as well. For this purpose nothing suits them as well as a 15.2, 1,100 pound trotter or pacer. Were such a people, and such a land found in a mountainous region they would turn naturally to the unroughbred, and Kentucky-gaited saddle horses as better suited to a rough country, than the light harness horse. These people have no use for a Percheron, and no use for a mule, as neither will meet their requirements on the road, but as you proceed westward the farms grow larger, the land more tenacious, the country more rolling, and there you find a larger, heavier horse, or a mule in far better demand.

These people are not trying to breed trotters and pacers, and they are right in not doing so; they want more weight in the horse, and they want a disposition that will stand rougher handling. To my mind, one mule is their best work animal, and a mule from the thoroughbred, half

thoroughbred, or highly-strung trotting or pacing mare will make a quicker and more enduring animal than any other I have seen tried. What the mule of the second tier of counties wants, more than anything else is gimp; that is, the nerve force that has been developed in the dam by generations of high feed and strenuous exertion on the race track. I have seen half thoroughbred horses that suit these people well; if from large mares of some trotting inheritance, the best of them come near to being general purpose animals, and they will stand more heat in the harvest field or in the corn field than any other type of horse I have ever tried in that section, but when you get back into the tier of counties just west of the Blue Ridge; counties like Rockingham, Shenandoah, and Augusta, you are in a transition region with a climate and altitude more nearly approaching that of Ohio and Indiana, the true home of the draft horse, than is that of Tidewater Virginia; and there your 1,100 pound half-bred or trotter, and even the almost omnipresent mule, unless he is a big one, would be as unable to meet and compete with the draft horse as the same draft horse would be unable to keep his wind in the blistering heat of a Tidewater harvest field, when harnessed beside a bigger-lunged, thinner skinned, more wiry and nervous animal.

In regard to the type of draft horse best suited to our Virginia farms, in altitudes where draft horses can do the work, it is, to my mind, largely a question of personal choice. As a general rule, the farther west you go and the higher and stiffer the land, the larger horse you will need, but over large sections of Virginia there are only two breeds that meet the requirements, the Percheron and the Suffolk Punch. Both have their admirers and ardent advocates, with the former in the lead as to numbers, as the latter are little known. Why this is so, I am unable to say; for those specimens of the breed I have seen seem to me, to combine more good qualities than any other race of farm horses. They are hardy, compact, docile, about the right size, with plenty of weight on short legs, and in these requirements are equalled by the Percheron, but they have two points which seem to me, superior to the latter; their good color (bays and chestnuts predominating) and the conformation of the hind quarters, in that respect all the English breeds are superior to the French. The Hackney has a better loin and quarters than the French Coach and the Punch than the Percheron. This I attribute to a national peculiarity not of the horses, but of the men. Show a fine horse to a French man, and he will look the animal over and examine the front legs, head and shoulders. Show the same horse to an Englishman, and he will end his examination by standing behind your horse to admire his quarters and stifles, if these parts are worthy of his admiration. This point is brought out by Mr. Lever in "Charles O'Malley," where during the Peninsular campaign the grooms walk behind the new horse, and the Englishman remarks, after running his hand over the animal's quarters, "Ear's the stuff to carry him over timber." "Or a stone-wall," says Micky Free, thinking of Galway.

The forequarters of a good French coach or Percheron horse cannot be excelled, but to my mind even the best of them are meaty rather than muscular in the hind quarters, and are particularly deficient in the loin and stifle;

and while the English breeds may not, as a class, quite equal the French in the fore quarters, head and neck, the loin and hind quarters of the Hackney and Suffolk Punch horses are beyond comparison, superior to those of the French coach and Percherons. Of course, there are exceptions that prove the rule. I speak not of individuals, but of the broad distinction of class. The Clydesdales and Shires I regard as too heavy for use as farm animals anywhere east of the Blue Ridge. This is a large country of ours, and there is room for all breeds, and locations where all will thrive and where all will not fail to meet the demands of humanity. There is more difference in climate, soil and altitude, in many of our States than is found in some of the smaller countries of Europe. Look at the level costal plain of Virginia, a land of long, straight, smooth, white roads, flanked by trees, regarded as avenues in less favored sections, as they arch from either side to meet overhead, forming seemingly interminable vistas. A land regarded as tame and uninteresting by the casual visitor, but one you learn to love on long acquaintance, and compare it with the wider landscape and noble views of the foothills of the Blue Ridge. There are few more inspiring sights on this poor old mused-up footstool of the Lord than some of these views over the peaceful countryside in Albemarle as you look westward to the Blue Ridge from some of the elevated points on the eastern borders of the county. I have sat on my horse minute after minute unable to tear myself away until the sinking of the sun behind the mountains warned me it was time to seek some shelter for the night. Such radical differences will make a distinction in the race of men after a while, let alone the breed of horses.

In regard to the thoroughbred horse, I hold peculiar views, which I might feel some hesitation in expressing were it not for the fact that I am the only person in the county who ever owned and bred from a thoroughbred stallion, and, therefore, can approach the subject without fear of prejudice in favor of other strains of blood, for I claim the thoroughbred running horse to be individually the most useless and procreatively the most useful of all the strains in horsedom. When I say individually the most useless, I mean that as a farm horse he is of too high a nervous temperament; as a road horse too slow; and as a saddle horse too rough gaited; for we want our farm horses of phlegmatic dispositions, our road horses with some speed at the trot or pace, and our saddle horses with some gait besides a trot at which they can negotiate long distances, for I take it no man, and, of course, no lady, who had ever accustomed themselves to the gaits of a Kentucky saddle horse would for one moment consider the riding of a trotting horse for a 100- or 200-mile trip, and to gallop a thoroughbred horse that goes as a runner should go is nearly as bad, for they draw up their hind quarters under them, and shoot themselves out in a way that is most exhilarating for a few minutes, but very tiresome when ridden hour after hour.

I want it thoroughly understood that I am not under-estimating the runner in his sphere. To gallop one over turf is one of the pleasantest pleasures I know, and the discordant shout of the rail birds, "They're off!" is sweet music to my ears, but to ride on the road: while it may be excellent for the liver, is certainly destructive to other

portions of the anatomical structure, and for my part, I greatly prefer calomel.

Procreatively, however, he has been tried, but never found wanting. His blood was largely used in founding the breed of trotters, and formerly it was the only blood that had an ancestry of long continued high feeding; and great development of nerve force. It was to the early trotters what the bull-dog was to the greyhound: it gave courage, determination and lung power to the pacer and trotter, and speed at their peculiar gait. In some cases it was used too little, and resulted in an undesirable type. In all cases it has long ago outlived its usefulness, for the breed has now a racing and feed inheritance of its own, which in the very nature of such things must be accumulative, and will probably culminate in setting our great-grandchildren to looking as eagerly for some more phlegmatic brains to mix with the future trotter as our great-grandfathers looked to the thoroughbred as a possible source of new force in their horses. The thoroughbred cross is now a backward step for our trotting horse breeders. Whether or not the saddle horse breeders need additional infusions of it is more than I can say. They have in this section a reputation for softness, and lack of stamina, which is certainly not characteristic of their thoroughbred ancestors, nor of the Narragansett pacer, and his ancestors, if the historical data unearthed by Wallace in his hunts among the musty records of antiquity may be trusted. It is probable that those specimens of the breed lacking endurance are deviations from a good average inheritance, due to lack of immediate ancestral development. At all events, where such weakness exists, combined with pronounced pacing inclinations, it may be remedied by the thoroughbred horse, should it exist in combination with loss of saddle gaits by a cross to the Hal family, of Tennessee, or any of the kindred strains which possess the lateral gait combined with a good racing inheritance, will do the work equally as well. The American trotter will be the best source from which to derive quality for the succeeding generation of coach and heavy harness horses, whenever it is demonstrated that they are falling below the required standard in that particular, for he not only possesses the required action along with it, but a rate of speed which the thoroughbred cannot give, and which is being more and more sought after by the wealthy purchasers of carriage horses. It would seem from the foregoing that even procreatively the runner has outlived his former usefulness with the possible exception of the saddle horse, but there is one field still unconsidered in which he is predominant, and in which I do not well see how he can ever be replaced. I mean as a sire of hunters. There is no race of horses that can be taught to jump so easily or that can so successfully transmit the power, quality and muscle, combined with firmness, and hardness of bone required in the steeplechase, or hunting horse, as the thoroughbred. Of course, there are some trotters and pacers that can jump just as there are exceptions to all general rules, but the mental tendency of the well-bred harness horse is to use his legs in pairs, one hind leg, with one front leg, when making great efforts, a proclivity which must be overcome in order to negotiate a jump, and is to that extent contrary to inheritance and inclination, but with the thoroughbred this is

not the case, his tendency leaning rather more to the use of his legs in pairs each two fore legs and two hind legs together, which habit needs only the slight modification of a lengthened stride for the broad jump, and in the high jump the handling of the legs in forward and rear pairs is still carried out, although the action is still more intensified.

Mr. Hunter, of Essex, I think, has expressed himself as favorable to the formation of a sub-race of thoroughbred horses selected especially for their size and quality as a successful venture in producing good general purpose horses. That this is can be done is a proposition which admits of no contradiction to my mind, and I am inclined to the opinion that the Irish breeders have already done this in the formation of the breed of Irish hunters, a few of which I have seen imported to this country by the members of the Meadow Brook Hunt Club, on Long Island, N. Y. I am sorry to say that I am not correctly informed as to the ancestry of these horses, and do not know whether they are the product of selection pure and simple, or whether they may not have a cold cross or two on the maternal side in the older generations, but of their excellence I am ever ready to bear testimony. We are generally inclined to associate what is large in horsedom with a tendency toward softness of muscle and coarseness of bone, and rightly so in most cases, as in almost all races of men and animals we find the small specimens are stronger and more active in proportion to height and weight than the large, but these Irish hunters would seem an exception to the rule as they possess the fineness of bone and density of muscle of the best of our racing stock combined with a size and weight that often approaches seventeen hands and 1,300 pounds, and, with it all, remarkably well balanced brains and more of what our English cousins call quality than I have ever seen in any other breed.

I am well aware that some of the views advanced above are not new, and have been already on the battle ground of controversy, and also that others are here advanced for the first time, and may expect a similar fate, still, such as they are, I hold them, and, until demonstrated to be misconceived, will hold them to be at least reasons for existing conditions for which heretofore breeders have attempted no explanation which has come to my cognizance.

PERCIVAL HICKS.

Mathews Co., Va.

FARM HORSES.

Editor Southern Planter:

Mr. John F. Lewis, in his article upon Farm Horses, in your last issue, seems firmly impressed with the superior value of his Percherons or heavy draft horses, and I admire the capacity to think strongly whatever you do think. But when he refers me for refutation of my fallacies to Mr. A. B. Hancock's letter, and also admonishes us (the misguided) to think a second and see that a pair of little misfitted hunters, trotters or runners will not bring the price of a weanling pure-bred draft colt. I fail to see the necessity of such mental effort as relevant to my preference for well selected and trained thoroughbred stock. Will you, Mr. Editor, re-publish the following extract from a contribution of Capt. R. J. Hancock

to the Southern Planter as far back, I think, as 1899? At least it was at that time re-published in several papers. "There never was an animal so thoroughly misunderstood by farmers as the thoroughbred horse and his crosses. I do know from actual experience of many years that the best general purpose horse is the large half-bred horse. I am now working every day sons of Eolus and Mount d'Or, the latter a son of Imported Mortimer and Carrie Atherton by Lexington. Our land is stiff, red clay and I defy any man to produce a three-horse team that are truer pullers or that will do more plowing than one of these teams. The half-bred is not only a good farm animal, but a breeder cannot go wrong in raising them, as they make the very best saddle and harness horses. They are easily kept fat and always show when a currycomb has touched one of them. * * * If you would take up the subject you would not only benefit the farmers greatly, but will improve the horse stock of Virginia more than a hundred per cent. in a short time. I would suggest and recommend the breeding of thoroughbred stallions on large native mares and mating the best native stallions on thoroughbred mares."

Now, I think Mr. A. B. Hancock, in his article referred to by Mr. Lewis, substantially endorses the views of his distinguished father, and while I could add the testimony to the same effect of a number of successful horse breeders in America, it is not my intention to prolong discussion of the subject. My own views are immaterial to the question here, but were plainly expressed in my article to The Planter a few months since and certainly I did not intend to advocate the claim to value of "a pair of little misfit hunters, trotters or runners" even in comparison with the "weanling pure-bred draft colt," having no special fancy for either type of horse mentioned.

P. S. HUNTER.

Essex Co., Va.

FARM HORSES.

Editor Southern Planter:

The way the big horsemen are roasting me reminds me of the way the beef cattlemen get up on their hind legs whenever one talks about a special-purpose dairy cow. Of course, where a farmer is situated so that it pays to raise horses he can raise draft horses profitably, and for many purposes he will find the big horses useful. But if the same men were farming on the level sandy soils of the cotton country of the South Atlantic coast, they would find that the big Percheron was out of his element. If I was farming on the rolling hills of the great valley I would probably want big horses. On the level, light, sandy soils, where I now live they are not needed except for heavy hauling in the town, and even on our streets the motor wagons are getting common, and as we are prohibition people we do not have any big beer wagons. Mr. Lewis has doubtless found the Percheron best suited to his purposes and I am perfectly content that he shall prefer them there. Mr. Lewis may think it a disgrace to breed a Percheron mare to a Jack, but in many sections there is more money in mule raising than in horse raising, and one wishing heavy mules could not do better than to use Percheron mares. It is a matter of money rather than sentiment. I have never owned a Suffolk Punch,

but from what I have seen I would agree with the Editor that they would be a far better type of farm horse for general use than the Percheron, though I cannot get over the old Virginia liking for a horse that has some thorough-bred blood in him. It was bred in the bone.

W. F. MASSEY.

PERCHERONS PREFERABLE TO SUFFOLK PUNCH;
OR, PRACTICE VERSUS THEORY.

Editor Southern Planter:

Messrs. Massey, Hunter and others, and even the talented Editor of *The Planter* have seen fit to express their opinion on the best farm horse. I have no doubt that all of these gentlemen are qualified to fill some position or profession, but I dare say that if any one of them had been started in the horse-breeding business one and all of them would often have retired on an empty stomach; for any man who advises breeding a "general purpose" horse is doing an injury to the country, and the "cranks" who follow his advice. If, as all of them say, they prefer such a horse, buy him, let the other fellow breed and raise him.

On Wednesday, June 24th, at Col. Cooper's sale, Union Stock Yards, Chicago, a pair of ton geldings were withdrawn from the sale ring on an \$800 bid. Now how many Suffolks or Suffolk grade geldings do you suppose it would take to bring that amount?

Price record in Chicago for drafters last season were broken by a load of big ones—£1 head that averaged \$422.15—the highest figure on a single drafter for the year was \$530, and \$940 for a pair, and the increased price in horses has been extraordinary. In 1897 the horses in the United States had a valuation of \$31.51-100 per head, and in 1907 their valuation had risen to \$93.51-100, although the wise penny-a-line writers had written the horses' obituary many times over.

My advice to breeders or farmers is to try and produce something that will bring the most money for the same outlay, or less, and that is a big gelding with quality, not a gunny-legged beef, but a horse with good, big, clean bone, and no horse has yet been found or bred that fills the bill as does the Percheron. Ask the users on city streets what horse carries the best middle on same ration, moves a heavy load with most speed, has the cleanest limbs, and best feet; and nine out of every ten, I venture to say, will name the horse of Perche. I did not go into the business on a day's thinking and observation; it would have been much better had I done so though, as things have turned out, but I was a son of a man who believed that the thoroughbred was the only horse, better for racing, riding and driving, and all work; and, having friends who were prejudiced against the heavier horses or drafters, I was persuaded to try a half-brother of Longfellow (Excel), bred to native, or the Conestoga mares to beget "farm horses" and salable geldings, and on the mares from this cross I tried another thoroughbred, a 1,300 pound son of Harry Bassett's (Bow-string). I not only lost much time and money, but I got nothing too good for an old fashioned street-car horse. Then I bred a rough Conestoga mare to one of Col. S. W. Ficklen's Percheron stallions, and got a filly that I sold as soon as weaned for \$125. I then commenced breeding all of my work mares

to pure-bred Percheron stallions; then I bought my first Percheron stallion, a fairly good horse, for \$1,650, and only had \$300 in cash to pay on him, so I had to go in debt to buy him. After breeding grades for a short while, I figured that I could make time and money by buying some pure-bred mares, and while not yet a multi-millionaire, I have managed to live and make a little money.

I have to-day twenty-nine Percherons, all registered and good individuals. I sold a weanling for \$450; two yearling fillies for \$800; one 2-year-old for \$950; another 2-year-old for \$1,400; a pair of fillies two years and three years old for \$1,200, and numerous others at from \$300 to \$600 each. What would the same aged Suffolk Punch colts have fetched?

As to "M's" statement that the Percheron has been pampered for generations, I take issue with him there. I have never seen as hard horse masters in this country as I met in France, and at Havre I saw a big Percheron stallion hitched to a long ladder-like dray, pulling 23 bales of cotton. I also saw on the pike in Franklin county, Pennsylvania, a pair of mares weighing probably 1,800 pounds each hauling 128 bushels of wheat into Greencastle, a distance of over three miles, and this, the owner told me, was done every day, making two trips, and he had his big wheat crop on two farms to move with these two-horse teams, and he also said he had hauled as much as 140 bushels with two horses. While this pike is good and solid, still all around Greencastle there are some very high hills over which these teams had to pull. I will wager a pair of Percheron mares against a pair of Suffolk Punch mares, that I can show four pairs, any one of which will move a load quickly over a mile that no Suffolk Punch mares can start. This I considering offering odds of about three to one, valuing the mares as they should be.

Now, as to the Percheron disposition, when a man attacks the disposition he shows his utter ignorance of Percheron character, as no horse, not even the Shetland pony, has a disposition as good. I have worked four aged stallions together in a four-horse team, and every day during the breeding season my stallions are testing and serving mares and I work them regularly half day, always one, in the four-horse team, and often two, using them with mares in and out of season. I never owned a vicious Percheron, but I have owned two vicious thoroughbreds. I am not wedded to any breed of horses, and if I thought the mule a better animal and more of a money maker, I would have several Jacks before this week was out.

Excuse me, in my (brief) article I neglected to call attention to Armour's great size horse team of greys noted on both sides of the sea. The average weight per horse is considerably over a ton, and one of the wheelers, "Jim," weighed at the International 2,480 pounds. These horses go over the road like road horses, and are used on the streets regularly, "Big Jim" having been used for over ten years on city streets, and is as sound as a gold dollar. It is said "Where ignorance is bliss it is folly to be wise," so that the majority of users of drafters are satisfied with Percherons.

JOHN F. LEWIS.

Rockingham Co., Va.

Miscellaneous.

THE VIRGINIA STATE FARMERS' INSTITUTE.

We extend a hearty welcome to the members of this Institute, meeting in this city this month for the first time in its history. We are expecting to see the greatest gathering of Virginia farmers that ever met together in the State for the purpose of increasing their knowledge of the basic factors underlying the successful prosecution of their calling. A fine programme of subjects has been selected, and these will be handled by men of recognized ability and leading in their several lines, and in the discussions, which will no doubt follow the opening of the subjects, there cannot fail to be brought out facts of the greatest value to every farmer. As a close to the proceedings the members will, through the kindness of Mr. C. H. Senff, of Curl's Neck, and the business organizations of the city of Richmond, through the Chamber of Commerce of the city, be given a trip down the James River, with a call at Curl's Neck, the magnificent 5,000-acre plantation of Mr. Senff, where they will have the opportunity of seeing farming carried on on the largest scale, and magnificent crops of alfalfa (300 acres), corn and other crops being produced. If the day should be fine this outing will be a most enjoyable and instructive one. We extend an invitation to the members to make our office their headquarters, and to use it for their convenience in every way desired. We put ourselves and our office staff at their service to help to make their visit in every way enjoyable.

THE VIRGINIA STATE FAIR.

The premium list of the Virginia State Fair, to be held in Richmond, October 5th, to 10th, both inclusive, has been received at the office of the Southern Planter, and copies are now being sent through the mails to farmers, live stockmen, planters, orchardists, gardeners, poultry fanciers, apiarists, manufacturers, and farmers' wives and daughters in every section of Virginia. It is a very complete and comprehensive book, and contains the rules and regulations pertaining to exhibits, information concerning transportation, and all particulars necessary for exhibitors to know. Copies can be obtained by addressing Mark R. Lloyd, General Manager, Richmond, Va., or by calling at the office of the Fair, No. 819 East Main St.

The premiums aggregate \$35,000, more than two-thirds of which is devoted to the horse, cattle and other live stock departments, farm products, domestic, etc. The farmer must, therefore, feel much encouraged, as the premiums do not run largely to racing, as is the feature of many fairs, but are for the most part for the promotion of agriculture and horticulture. This is the prime object for which the Virginia State Fair Association was organized. The fair is the farmers' exhibition, and every tiller of the soil in this great old State should regard it as such, and take a pride in assisting to make it a success.

The attention of the Virginia State Farmers Institute, to be held in Richmond on the 4th, 5th and 6th of August, will be called to the generous provision that has been made for the farmers of the State in the way of premiums,

and that it is up to him to take advantage of the liberal offers and show to the world what Virginia soil and Virginia brain and brawn can produce. Of course, there will be racing. No fair could be held without it, and to stimulate a sufficient interest on the part of horsemen, and and secure satisfactory lists of entries, liberal premiums had to be provided. The races will extend over the six days of the Fair, covering every feature—trotting, pacing, and running; steeplechase and hurdle races, high jumping classes, and saddle contests, with the last day of the Fair (one out of the six) set apart to the rival of the horse—the automobile.

The fact must not be overlooked that it is through racing that the wonderful development of the horse in this country has taken place; that the raising of high-class horses and thoroughbreds has been thereby encouraged, and that America has become a horse market of the world. Millions of dollars are invested in the stables of this country and foreigners eagerly pay from \$10,000 to \$25,000 for a race horse, as in the case of the noted stallion "Cresceus," record 2:02¼, that went to a Russian racing man and breeder.

Elsewhere in this issue will be found a very thorough resume of the premiums offered in the different departments of the Fair, in the form of an advertisement, covering a full page, to which the attention of the reader is invited. The handsome action of the various Breeders' Associations of the United States, in offering hundreds of dollars as well as gold medals and silver cups, to stimulate the raising of fine horses, cattle, sheep and hogs in Virginia, should not escape attention, and we hope to see as a result that there will be lively competition amongst our local breeders for these special premiums.

Again, the action taken in fixing special premiums for farm products should not be overlooked. Of the large number of counties in Virginia, many ought to be represented in the "county exhibits." It will surely pay an organization in each county to make a collective exhibit. The first premium of \$50 should be sufficiently attractive, while there is a second premium of \$25. But the honor of receiving the award, and the proclaiming of the same through the newspapers, should be of greater value to the county interested than all the cash that could be paid out. The premiums for individual collections and sweepstakes for farm products are also very liberal.

Fruit growers will be interested in the horticultural department, where premiums will be found for the different varieties of apples, pears, peaches, plums, grapes and other fruits raised in Virginia. Commercial orcharding is recognized, and the premiums should induce fine exhibits from the companies, firms and individuals who have gone extensively into the business of supplying home markets, and the markets of the largest cities of the United States with fruit grown on Virginia soil, as well as shipping largely to foreign countries. It is pleasing to know that the Virginia State Horticultural Society will have a special exhibit of fruit at the Fair, not for competition, but as an example of what we can produce.

The farmer's wife and daughter should also heartily cooperate in making the Fair successful. Premiums will be found for ladies' bandiwork; for specimens of their skill in needlework and embroidery, lace work, crocheting and knitting; for art work—paintings, drawings, pen and ink sketches, etc. And even the children can take part, as there are a number of premiums for work done by children under sixteen years of age.

The ladies can also show their skill in the culinary art by exhibiting bread, and cakes, pies, custards, buns and ginger snaps.

This is the preserving and pickling season and the ladies should carefully scan the premium lists and then prepare jellies, preserves, fruit butters, canned (jarred) fruits and pickles for exhibition at the Fair.

The grounds and buildings of the Fair are in fine condition, and there are but few better arranged plants of the kind in the United States. For some weeks there have been horses in training on the race course, and they have been brought up to a high degree of proficiency. They are now fit for the contests that will take place during the ensuing three months, which will end with the closing days of October in North Carolina. This interest on the part of the horsemen has resulted in the making of an important horse market in Richmond, and the establishing of the Southern Stock Yards, thus bringing many thousands of dollars to Richmond to be distributed among Virginians. Now let the farmers of Virginia emulate the horsemen, and be equally active in behalf of their own interests.

We are glad to note that all preliminary work incidental to the holding of a Fair which is intended to be the greatest strictly agricultural fair ever held in the South, has received the personal attention and supervision of Mr. Lloyd, the General Manager, whose experience in work of this kind has been large, and to whom the success of the last two fairs was largely to be attributed. He is personally known to most exhibitors at fairs and these gentlemen have always most highly commended his arrangements, and we cannot doubt but that the same will hold good at this Fair. To assist Mr. Lloyd, the directors have secured the services of Mr. Cyrus T. Fox, who for many years was associated in the work of the Pennsylvania and other fairs, and who has also had previous experience in such work in this State at Radford, Roanoke and elsewhere.

FARMERS' INSTITUTES.

Editor Southern Planter:

The Pennsylvania folks, or at least some of them, have been scoring me roundly for criticisms I have made in regard to the practice there of having night sessions to which the village folks crowd for an evening's entertainment, and at which any practical farm talk is totally wasted, and the popular man is the one who makes the most fun for the audience. I have characterized these night sessions as a waste of the public money and an imposition on the State speakers, who are supposed to come for the enlightenment of the farmers. The night sessions involved traveling the latter part of the night and usually the next morning, so that the first session of the next

Institute began at 1:30 P. M. instead of the morning, as it should have done. Then some local politician must make an address of welcome and tell the farmers what great and important people they are and how much he would like to live the independent life on the farm. Then some one else must make an address in response, and by the time these two have aired their eloquence half the afternoon has passed and nothing of the real work of an Institute has been accomplished.

Some of my critics say that I am opposed to the farmers enjoying themselves and want to make talks like "Hark from the tombs," when, in fact, I appreciate an anecdote that points what a man wishes to illustrate. But when a speaker spends a whole hour telling in a funny way about the kissing games of his youth, and how John courted Mary, and not in the whole hour makes a suggestion that would be of any value to farmers I get disgusted with that sort of an Institute. There is no sort of objection to the village folks having an evening's entertainment and to have the school girls recite "Curfew Shall Not Ring To-night," with all sorts of gestures, or to have as many comic singers as a vaudeville show, provided they do not call it a Farmers' Institute, and let the Institute speakers go their way.

A Farmers' Institute is a meeting for a definite and serious purpose. The time is always too short to discuss fully all the topics presented and to answer all the questions that farmers may want replies to, so that it is a pure waste of time to make them the occasion for a politician to air himself in a long speech and some one else to reply, and it is just as much a waste of time and money to make the night sessions mere village entertainments, and the Institute is better without them. In Pennsylvania, the organization is too complex. The State Director gets up the general itinerary and remains at Harrisburg. In each county is a County Chairman, who arranges for the meetings and prepares the programmes, but is not Chairman at the Institutes, for they elect a local Chairman at each Institute, and he may be a good, bad or indifferent one, generally the latter. Then one of the State speakers is nominally in charge of the party and Institutes his party attend, but really has no management except to report numbers in attendance, and this is the main purpose of the night sessions.

I was struck with the great difference when I came to the Maryland Institutes. Here the State Director attends the Institutes and is the Chairman and controls them. There is no time wasted in speeches of welcome, but the real work of the Institute is taken up at once and nothing else is allowed to interfere with it. The farmers come out for the serious purpose of getting information that may help them in their work, and at the close of the afternoon sessions they go home, and there is no vaudeville for the village folks at night. The same method is practiced in North Carolina, and, so far as I have observed, at the Virginia Institutes, but in the more populous States northward, where liberal amounts are given by the legislatures for Institute work, the entertainment feature is often allowed to overshadow and crowd out the real purpose of the Institute.

Though they have roasted me for what I have written

In regard to the Pennsylvania Institutes, I rather expect that there will be less of the evening vaudeville next winter. I hope so at least.

W. F. MASSEY.

PRESERVING OUR NATURAL RESOURCES.

Editor Southern Planter:

The useless waste and destruction of agricultural soils in America, which has gone on unchecked and unheeded for the last century, has at last reached such alarming proportions as to attract the attention of all classes of our citizens. The national character of this problem early attracted the attention of President Roosevelt and resulted in the recent conference held at the White House, which was participated in by the Governors and leading representatives of practically every State in the Union, to consider ways and means for the conservation of our great natural resources.

Among the subjects considered most exhaustively was that of soil erosion, the distressing results which follow it and a means by which it might be most effectively held in check in the future. Those who have been interested in problems of this character long ago recognized that the isolated effort of an individual here and there could accomplish little in bringing the mass of the people to a proper realization of the extent of the losses suffered through erosion and the effect this waste would ultimately have on future generations. The conference itself soon realized that the only hope of preventing this waste would be through a type of education of sufficient versatility to reach and impress the average citizen who cultivates the land with the grossness of the practice now in vogue and the necessity for changing the same in order that future generations might share and benefit in the magnificent patrimony which nature had given to this nation.

The gravity of the problem of soil erosion becomes quickly apparent to the reflective mind. Vast areas of a once fertile and densely populated country are now a barren waste, as is testified by the departed civilizations of Asia, Africa and parts of Western America and Mexico. That these countries were once fertile and productive and maintained a teeming population is fully substantiated by historic investigation; that they are now incapable of nourishing mankind is equally certain. How they were brought to this condition has long been the subject of study and research, and geologists now seem to quite generally agree that the abandonment of these vast sections of the globe was brought about through an indifferent agricultural practice which permitted the forests to first be destroyed and the soil to be completely carried away by the erosive action of water; the soil not only being carried away and destroyed, but the source of soil fertility, that is, an abundant supply of water, being dissipated as well through the destruction of the forests. The dreadful calamities which have overtaken countries famous as the seat of our earliest civilizations, bring home to us in no uncertain manner the necessity for safeguarding what nature has given us, and of making an effort through education and the development of more intelligent systems of agricultural practice to preserve our greatest national heritage—the soil.

That erosion is a most destructive agent, and that some steps must be taken to check its progress was illustrated

by the address of Secretary Wilson, in which he pointed out the fact that through the gradual loss of fertility in the eastern and southern United States especially the farmers have now been forced to use large amounts of commercial plant food in order to raise profitable crops. Of course, soils vary greatly in their natural inherent fertility, and it is doubtful if much of the land in the section referred to was ever as rich as the virgin prairies of the middle West, but the continuous growth of corn and wheat has shown the farmers in those especially favored sections that their lands are not inexhaustible, and that through the leaching and washing which goes on from year to year, in sections where satisfactory rotation is not practiced, the soil soon becomes depleted of some of the elements which science now recognizes as necessary to the production of a perfect plant. Since it is estimated that more than one billion tons of earth are carried into the sea by our various rivers each year, it is not surprising that the use of commercial fertilizers has become necessary in practically all parts of the country. Geologists estimate that the first four feet of soil, which may be regarded as that section of the earth's crust chiefly utilized in crop production, have probably been forming for more than forty thousand years, but that at our present rate of erosion there is a foot of waste in from four to six thousand years. It is thus seen that while the soil is only limited by the depth of the earth's crust, that it is transformed from the parent rock into that condition capable of maintaining plant life very slowly, and that at the present time erosion is going on much more rapidly than the disintegration of rock into the soil. It is for this reason that without any desire to be sensational the problem of soil preservation, which is so closely interwoven with the permanent prosperity of a people, assumes such a cosmic character.

Presupposing that every tiller of the soil could be made to realize the vital nature of this question at once, it is apparent that there are vast areas of land which have been and are still devoted to the plow, which produce such meagre crops as to often be cultivated without profit by the owner. What to do with these soils is a problem of national magnitude. To those who are familiar with the virtues of commercial fertilizers and the splendid results which follow the liberal application of proper rations of especially prepared plant food to the soil, the answer will not be difficult. Through the use of modern implements a good seed bed may be prepared, even when the soil is deficient in vegetable matter, and then if the supplies of nitrogen, phosphates and potash needed by the special crop are applied, profitable results may be anticipated in most instances. Even where the surface of the soil is denuded and in bad physical condition the stimulating effect of commercial fertilizers will enable it to be quickly and profitably reclaimed. This is a statement which needs no further substantiation in view of what has already been accomplished in all sections where erosion or soil exhaustion has become a question of any considerable proportions.

There are those who will argue that soils are of two kinds—first, those in place and, second, those formed as the result of transportation by water. Since soils in place are, as a rule, derived from the parent rock, and chemical

analysis shows them to be deficient often in certain necessary elements of plant food, it has been concluded by many that they must be permanently abandoned. An example will illustrate. There are thousands of acres of land which have been derived, for instance, from the underlying sandstone rock. Naturally, these soil areas are deficient in potash, and, until properly balanced up, will not produce large or profitable crops. In some instances, these sandstone soils have been transported by erosion and spread over the lowlands, and for many years great difficulty was experienced in growing some of our most common crops. With the discovery and utilization of potash as a commercial plant food, these have become increasingly valuable from year to year to their owners and a source of permanent wealth to the entire country. Today there are hundreds of acres devoted to the cultivation of cotton, corn, peanuts and various truck crops which could not be profitably utilized were it not for the application of potash to the soil in commercial form. Thus, whilst soil erosion is a menacing problem, and one which should engage the attention of every industrious citizen, it is quite apparent that through the utilization of commercial fertilizers the exhausted areas of soil may soon be restored and that vast areas of land considered of little value by reason of the nature of the parent rock from which it is derived may be brought under cultivation and made to produce a part of the necessary clothing and food supplies of the nation.

G. F. MARSH.

New York State.

THE VIRGINIA POLYTECHNIC INSTITUTE.

(State Agricultural and Mechanical College.)

We are in receipt of the catalogue of this Institute for the ensuing season and desire to invite the attention of our readers to the advantages offered for the education of the young men of the State in their practical life work. The courses in agriculture and mechanics are full and complete and no young man taking either and making the fullest use of his opportunities can fail to become thoroughly equipped for earning his living and securing a good start on his life's journey. We are especially anxious that our readers should give attention to the opportunities offered for training young men as farmers. Agriculture is the basic industry of the wealth of this nation and every day becomes more important in its bearing upon the prosperity of the people. The day has gone by, never to return, when the farmer was regarded as the last refuge for those who could not otherwise earn their daily bread. The farmers' calling is now at least the equal of any other, indeed for complete success in his work a farmer must be more than equal in intelligence and in the ability to apply science in his work. No man, however highly placed or however well supplied with this world's goods should now hesitate for a moment to make the most promising of his sons into farmers. The world needs them and needs them badly, and is consequently prepared to pay them well if properly fitted to execute the work committed to their care. To put them in a position to fill this requirement they must be properly educated in technical and scientific lines and for this education the Virginia Polytechnic Institute is fully equipped. It offers both short and full courses to meet the requirement both of those who can afford to spend

time and money and of those with whom these two factors are matters of serious importance. The Apprentice course is a new feature and one which we highly commend to the notice of farmers who whilst anxious to give their sons the benefit of a scientific training, can yet not afford to send them for a full course. With the training which can be got in this apprentice course, a young man will be fitted to read and study and work intelligently on the farm and understand the reason for doing things and this scientific training will lead him to join the winter short course and further advance his knowledge and practical training. The cost of these two courses is small and any young man taking them will find the money well spent. For young men who have taken these courses who desire situations, openings are constantly being offered at salaries from \$1000 to \$1500 per year. Surely such salaries as these should be tempting enough for the sons of farmers to equip themselves to fill them and even if they failed to secure one of these openings, their ability to make the work on their own farms so much more effective by reason of their training would in most cases result in an equivalent greater profit at home. Send for the catalogue and study it and write President Barringer for his advice. There are always plenty of young men ready to take the mechanical courses. It is a reflection on the farmers that they have hitherto failed to avail themselves of the opportunities offered by the agricultural side of the College. The day when the fool in the family was made into the farmer has passed. It takes a wiser man to make a good farmer than any other calling and farming now offers greater openings than any other business.

HOG FEEDING.

Experiment at the Blacksburg Experiment Station, Va.

CONCLUSIONS.

1. Considered from the point of gain per head per day, skimmed milk and blood meal produce very similar results when used as supplements to corn, when 18 pounds of skimmed milk is fed for each pound of blood meal; or on the basis of one pound of digestible protein in the form of skimmed milk to one pound of digestible protein in the form of blood meal.
2. The profit made during the entire experiment differs less than one dollar. From this data we concluded that blood meal and skimmed milk have a similar feeding value when fed on the basis of an equal number of pounds of protein, and as supplements to either old or new corn.
3. Hogs fed old corn made gains slightly in excess of the hogs fed new corn in the ear. The difference is so slight that we conclude that there is very little to choose between these two forms of corn as regards average gain per head per day.
4. Hogs fed old corn made a profit slightly in excess of hogs fed new ear corn.
5. There is no difficulty in using blood meal for hog feeding if it is fed with a small quantity of middlings or some other palatable food, exercising reasonable care to get the hogs started right and not to overfeed at any time.
6. Where a good market is offered for skimmed milk, a margin of \$1.00 between the cost and selling price of the hogs is necessary in order that this by-product may form a part of the ration fed to fattening hogs.

THE
Southern Planter

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

J. F. JACKSON,
Editor.

B. MORGAN SHEPHERD,
Business Manager.

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

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

ADVERTISING RATES
Will be furnished on application.

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

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

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

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

No anonymous communications or enquiries will receive attention.

Address THE SOUTHERN PLANTER, RICHMOND, VA.

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

INSURE YOUR HEALTH AND COMFORT
on stormy days by wearing a
TOWER'S FISH BRAND SLICKER
Clean - Light Durable
Guaranteed Waterproof
\$3.00 Everywhere



A. J. TOWER CO. BOSTON, U. S. A.
TOWER CANADIAN CO. LIMITED, TORONTO, CAN.

BANK OF RICHMOND,
Main and Ninth Streets.

WOOD'S SEEDS—Best quality always.

Sow Crimson Clover

at the last working of corn and other cultivated crops.

It is the King of Soil Improvers,

increasing the productiveness of the land to a wonderful extent wherever it is sown.

It also makes splendid fall, winter and spring grazing, the earliest green feed or a good hay crop, and the land can be plowed and planted in corn or other crops the same season.

Land planted to corn that is sown in Crimson Clover at the last working yields constantly increasing crops of corn each successive year.

Write for price, and WOOD'S CROP SPECIAL, giving full information about Crimson Clover and other Seeds.

T. W. WOOD & SONS, Seedsmen,
Richmond, Virginia.

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.

WITH THE ADVERTISERS.

The Kemp & Burpee Mfg. Co. resumes its manure spreader advertising this month.

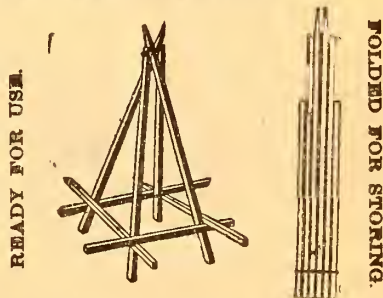
Mr. W. L. DeClow is advertising finely bred Duroc-Jersey hogs.

Desirable farms, timber and mining properties are offered by J. W. Guinn, general manager.

Moundville Stock Farm is offering five breeds of draft and harness horses.

Polled Durham cattle are offered at

Bell Hay Curing Rack



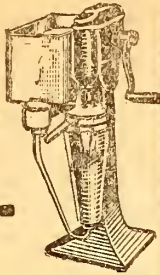
(Patented October 15, 1906.)
Solves the problem of curing pea vines, alfalfa or other hay almost regardless of weather conditions, as the racks give interior ventilation and keep hay from touching ground, thereby causing it to cure out nicely when other methods fail. One handling completes the work and the hay is safe. For prices and circular giving full particulars, address

H. E. BELL, Burkeville, Va.
Agents Wanted in Every County.

Dr. G. C. BOWE
Physician, Surgeon and Office Consultant.
No. 401 East Franklin Street, Richmond, Va.
Hours: 9-12 A. M., 1-4 P. M.
Evenings and Sundays by appointment.

CAPITAL AND PROFITS EARNED, \$1,200,000.
Special attention paid to out-of-town accounts. Correspondence invited.
Three per cent. Interest Allowed in Savings Department.
Compounded Semi-Annually.

Little Thefts from the Dairy-man



The difference between the Tubular and "bucket bowl" separators is measured in hundredths of one per cent of butter fat which the Tubular saves and the "bucket bowls" let go into the skimmed milk.

Hundredths of one per cent are hard to realize. Let's call it one ounce of butter fat lost each milking by a "bucket bowl," which

The Tubular Would Save

This would amount to 45 pounds of butter per year, worth at least \$11.25.

"But will the Tubular make this saving over a 'bucket bowl' separator—every 'bucket bowl' separator? Will the Tubular prevent or stop this sort of little twice-a-day theft in my dairy?"

We're ready to stand the cost of a tryout and proof. Write for Catalogue No. 290 then tell us how many cows you have, and how you now dispose of the milk. Then we'll tell you and prove to you what the Tubular can do for you.

THE SHARPLES SEPARATOR COMPANY,

West Chester, Penna.

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

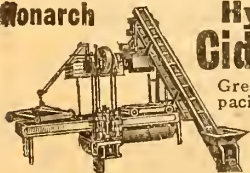
Robertson's CHAIN HANGING Stanchion



Is used and endorsed by thousands; will allow the animal perfect freedom to lie with its head in or out of the manger. Sold subject to a 30 days free trial in your own stable. Write for booklet.

O. H. ROBERTSON, 74 1/2 Camp Street, Forestville, Conn.

Monarch Hydraulic Cider Press



Great strength and capacity; all sizes; also gasoline engines, steam engines, sawmills, threshers. Catalog free.

Monarch Machinery Co., 610 Cortlandt Bldg., New York

PLANET JR. Implements Save you money.

S. L. Allen & Co., Box 1107X, Philadelphia.

bargain prices by Mr. Thomas Thomsinson, proprietor Tate Springs, Tenn.

Rhode Island Red breeders will do well to look up the announcement of Dr. J. H. C. Winston.

Poland-China and Shropshire sheep are advertised by Mr. W. O. Durette. Look up his announcement.

Mr. H. B. Arbuckle is advertising Red Polled calves of fine pedigree and splendid individuality.

Farm-O-Germ, a successful inoculating bacteria, is attractively advertised by Earp-Thomas Co.

The Va.-Carolina Chemical Co. has a seasonable announcement on another page.

The United Roofing & Mfg. Co. resumes its advertising in this issue.

W. K. Bache Sons & Mulford are advertising the "Fontaine" shock binder. Note the change in their regular advertisement.

Shropshire rams, ewes and lambs can be had at reasonable prices of H. R. Graham.

THE COST OF BUILDING A CREAMERY.

During the past few years there have been built in the United States several thousand creameries, many of which have been successful from the start, while others have failed after a few months' operation, and some were never even started.

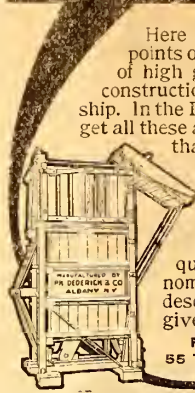
An investigation of the creamery business in several States by the United States Department of Agriculture has shown that the cause of many of the failures was due to the lack of a sufficient number of cows, which should not be less than 400, and that others failed because of improper organization, in the case of co-operative creameries, and excessive cost of building and equipment. Many creameries have cost about twice their actual worth, and were not of the type suited to the locality in which they were built.

The cost of a building about 28 by 48 feet will vary from \$800 to \$1,400, dependent upon the locality, the construction, and the cost of material and labor. Such a building usually consists of a main work room, engine and boiler room (including space for refrigerator machine) coal room, refrigerator, store room and office.

Machinery for a hand separator plant, consisting of a 15-horsepower boiler, 10-horsepower engine, combination churn with a capacity of 600 pounds of butter, and other necessary apparatus, will cost approximately, \$1,200. Machinery for a whole milk plant will cost about \$1,350. This equipment will handle from 1,000 to 1,200 pounds of butter per day. If a refrigerating machine is included, the cost will be from \$600 to \$1,000 more.

The total cost of a creamery would therefore vary from \$2,000 for a sim-

DEDERICK'S BALING PRESSES



Here are the three cardinal points of press building; materials of high grade; up-to-date, careful construction; and skilled workmanship. In the Dederick Baling Press you get all these and more; you get a press that will produce the most work with the fewest repairs; develops high efficiency with limited power. Wonderfully durable.

A press to fill every requirement perfectly and economically. Our free catalogue describes the entire line and gives valuable information.

P. K. DEDERICK'S SONS, 55 Tivoli Street, Albany, N. Y.

3 STROKE SELF FEED BALER

Our "Cyclone" three stroke self feed hay press is the latest, most powerful and most efficient press on the market. Each circle of the team presses in three charges. The self feed automatically puts the hay down to the bottom of the bale chamber. These two improvements wonderfully increase capacity of our presses. Write today for circular and prices. Five days' free trial.



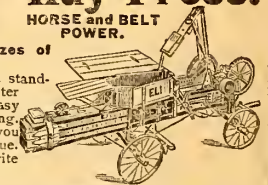
"Eli" Hay Press.

HORSE and BELT POWER.

38 styles and sizes of Presses.

For many years the standard. Lead in character of work, speed, easy and safe operating.

Don't buy until you see the Eli catalogue. Mailed free. Write for it today.



COLLINS PLOW CO., 1185 Hampshire St., Quincy, Ills.

CHAMPION HAY PRESS



The old reliable. Large feed opening. Long plunger travel. Twenty

years on the market. Thousands in use. What better reputation can a press have? Write for prices and terms.

FAMOUS MFG. CO.,

40 Chicago Ave., East Chicago, Ind.

SILOS

The "PHILADELPHIA," the best on earth. Has the longest test and most in use. Continuous opening from top to bottom.

THE ONLY OPENING

ROOF MADE.

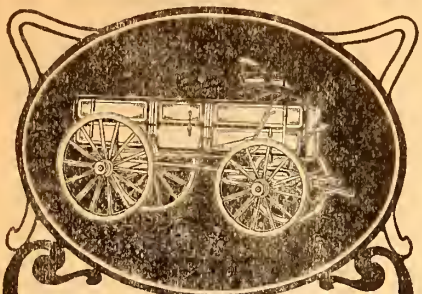
TANKS and TOWERS

Ask for prices and new catalogue.

E. F. SCHLICHTER CO., 10 South Eighth St., Philadelphia, Pa.

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

LONG SERVICE



FARM WAGONS

THE wagon that breaks down and has to go to the repair shop every once in a while is not a good wagon to buy.

Such a wagon is a poor one because it is poorly constructed, and because it is made from poor and improperly seasoned material. It is dear at any price.

In the building of Weber and Columbus wagons there is always a rigid observance of these four indispensable requisites:

1. Proper wood materials,
2. Thorough seasoning,
3. Superior ironing,
4. The best of skilled workmanship.

These are the things which have built up the excellent reputation everywhere enjoyed by

Weber and Columbus Wagons.

The New Bettendorf Wagon has steel gears which make it a wagon for any climate, and practically unbreakable.

Strength and durability should be first considerations when you buy a wagon. The Weber, Columbus and New Bettendorf wagons can be relied upon for long, satisfactory service. They are built to haul heavy loads and to stand the rough usage to which farm wagons are always subjected.

These wagons are in the front rank of high-grade wagons.

With all the strength and durability of these wagons, they are not made excessively heavy. They are noted for their light running qualities.

International local agents will be glad to show you these superior wagons and furnish catalogs with all desired information. Call and take the matter up with them or write direct to the home office.

International Harvester Company of America, Chicago, U. S. A.
(Incorporated)



Wheels, Freight Paid \$8 75
for 4 Buggy Wheels, Steel Tires on. With Rubber Tires, \$15.20. Imfg. wheels 3/4 to 4 in. tread. Rubber Tire Top Buggies, \$41; Harness, \$5. Write for catalog. Learn how to buy direct. Repair Wheels, \$5.50. Wagon Umbrella FREE. W. V. FOOB, Cincinnati, O.

Always mention The Southern Planter when writing advertisers.

ple hand-separator plant without artificial refrigeration, where labor and material are cheap, to \$4,250 for a whole-milk plant including artificial refrigeration and a higher cost of labor and material.

The Department of Agriculture is prepared to furnish information for the proper organization of creameries and cheese factories, and upon request will supply plan of organization, list of machinery, and plan for creamery. Correspondence should be addressed to the Dairy Division, United States Department of Agriculture, Washington, D. C.

HORSE BOOK FREE.

W. F. Young, P. D. F., 109 Monmouth St., Springfield, Mass., has recently issued a larger and more complete edition of his handy reference book, "How To Remove Blemishes," which will be sent postpaid to any address upon request. This little book will be appreciated by any horse owner, as it is full of "horsey" pointers and information that can be used to advantage. Send a postal to-day addressed plainly as above, and the book will be sent you by return mail free of all cost and postpaid.

THE WHITE PLYMOUTH ROCK CLUB.

All persons interested in the breeding of White Plymouth Rocks are requested to write R. W. Haw, R. F. D. No. 1, Manchester, Va., for application blanks to join this club. All fees amount to only \$1 a year. Enter now and get your name in the fine new catalogue about to be issued. Advertising space in catalogue is low. Write for rates. This is one of the most popular specialty clubs in America.

R. W. HAW,
State Secy. for Virginia.

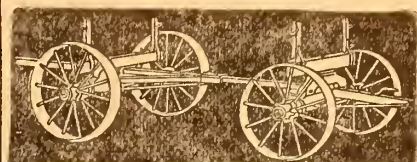
R. F. D. No. 1, Manchester, Va.

FARM SOLD.

Mr. W. M. James, of Loudoun county, has sold through P. B. Buell & Son, Herndon, Va., his 327-acre farm to Messrs. H. T. and M. W. Jones, of Eggleston, Va., for \$12,500.

SALE OF REGISTERED STOCK.

We invite attention to the advertisement of Dr. C. G. Cannady, proprietor of the Raleigh Court Stock Farm, Roanoke, Va. The Doctor has decided to dispose of his stock, and will, therefore, hold a public sale at the farm, a half mile from Roanoke city, on August 20th. The offerings will consist of about 80 head of Jerseys, Holsteins, grades and Berkshires. This will be a splendid opportunity to get some finely bred stock at your own figure. Parties who are unable to attend the sale are invited to mail their bids on whatever is wanted, and they will be given prompt and careful attention.



WHAT DO YOU SAY?
Several hundred thousand farmers say that the best investment they ever made was when they bought an **Electric Handy Wagon**

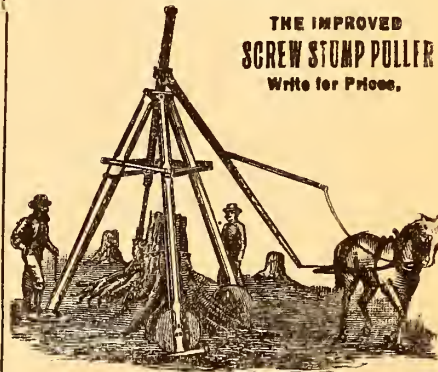
Low wheels, wide tires; easy work, light draft. We'll sell you a set of the best steel wheels made for your old wagon. Spoke united with hub, guaranteed not to break nor work loose. Send for our catalogue and save money. **ELECTRIC WHEEL CO., Box 146, Quincy, Ill.**

Farmers' Handy Wagon

Absolutely the best wagon built for every kind of farm work, and the cheapest you can buy. It is low down, has wide steel wheels and wide tires, and will last a lifetime without repairs. Can be depended upon to haul any kind of a load. Guaranteed in every respect.



STEEL WHEELS for farm wagons—any size to fit any axle. Send for our free booklet before you buy a wagon or a set of wheels. **EMPIRE MFG. CO., Box 140 AH, Quincy, Ill.**



THE IMPROVED SCREW STUMP PULLER
Write for Prices.

Chamberlin Mfg. Co., Olean, N. Y.

HERCULES Stump Puller

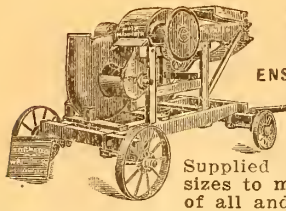


Clears an acre of heavy timber land each day. Clears all stumps in a circle of 150 feet without moving or changing the machine. Strongest, most rapid working and best made.

HERCULES MFG CO.,
413 17th St., Centerville, Iowa.

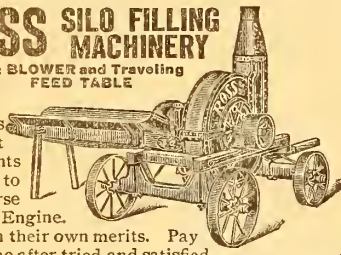
GETAWAY TOOLS FOR LARGE HAY CROPS.

Three of Clark's Intense Cultivators produced last year on 1 1/2 acres, 102 tons of well dried alfalfa, timothy and redtop hay. If you want to know how, enclose a 2-cent stamp to **GEORGE M. CLARK, Higganum, Conn.**



Tornado
Feed and
ENSI AGE CUTTER
For the
Preparation
of all kinds
of Feed.
Supplied in various
sizes to meet demands
of all and either with
or without.

Traveling Feed Table, Carrier or Blower
mounted or unmounted. Also equipped
with interchangeable cylinders, making
it possible to reduce corn, rye,
oats, hay, alfalfa, etc., to any desired
state. Write for our new catalogue,
containing information concerning silage
and silage equipments. If inter-
ested we will quote lowest possible
prices upon both TORNADO Silo and
Silo Filler. Manufactured by
W. R. HARRISON & CO., Massillon, O.



ROSS SILO FILLING MACHINERY
With BLOWER and Traveling
FEED TABLE
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.
LARGEST CAPACITY AND STRONGEST BUILT
Write for catalog. We have had 58 years
experience and are the largest and oldest man-
ufacturers of Ensilage Machinery in the world.
THE E. W. ROSS CO., Box 16 Springfield, Ohio
We also make ROSS SILOS and MANURE SPREADERS.

HENING & NUCKOLS,
Gen'l Agents, Richmond, Va.



SILO FILLERS Whirl-
wind
with wind elevators for any power
from 4 to 12 H. P. will Cut or Shred
green or dry fodder and elevate to
any height. Get Free catalogue and
our trial proposition.
Wilder-
Strong
Implement Co.
Box 82 Monroe, Michigan.

—GET—
**DEERING BINDERS,
MOWERS AND RAKES.**
—Also—
**BINDER TWINE,
HARVESTER OIL.**
AND REPAIRS AT
Fuller Brothers
DANVILLE, VA.

We Will Give A RURAL MAIL BOX,
Galvanized Steel Rural Mail Box made, to the first
person sending address of party canvassing for peti-
tions for new Rural Route. Write today.
KENTUCKY STAMPING CO., DEPT. 35 LOUISVILLE, KY.

A ROLLER-BEARING MANURE SPREADER.

What seems to be a most important
improvement on manure spreaders has
lately been made on the old reliable
Success Spreader. Its manufacturers
have made it a roller-bearing spread-
er. In this particular, at least, no
one can deny that the Success is in
a class by itself. It is the only roller-
bearing spreader.

The advantages of this improvement
can hardly be overestimated. Manure
spreaders have hard work to do. They
must haul heavy loads over rough
grounds, and they must be in opera-
tion. They must, therefore, be made
heavy and strong. This accounts for
the heavy draft and the hard running
that characterize all spreaders. By
this single move the Kemp & Burpee
Mfg. Co. have greatly reduced the
draft of the Success Spreader, and
have at the same time made it a re-
markably easy operating machine.

Other things that make the Success
smooth and easy operating are its
remarkable simplicity, its positive
workings and its direct application of
power. The worm and gear, part of
its admirable driving system, run in
oil. There is a notable absence of
gear wheels. Power is applied by an
unbreakable steel-pinned chain. Noth-
ing could be more direct which will
be apparent to any one who will study
the illustration in Success Spreader
advertisements.

No fault is ever found with the suc-
cess Spreader on the ground of
strength. Extra strong wheels, steel
axles, staunch oak and ash frame,
panels of box bolted to uprights with
strong flat-headed bolts; these indi-
cate the materials and making of the
whole machine. An excellent feature
is that all pressure and strain on the
cylinder by reason of driving machin-
ery is upon the strong rear axle. It
is not upon the box.

We believe it is to every farmer's
interest to investigate the Success
fully before buying a spreader. It is
a machine that bears investigation.
The new roller-bearing features are
bound to make it more popular than
ever. This, especially, should be
borne in mind in choosing a spreader.

A card to the Kemp & Burpee Mfg.
Co., Syracuse, N. Y., will bring all
desired information.

Caroline Co., Va., Mar. 27, 1908.
I have been taking the Southern
Planter now for two years and find
it quite a source of pleasure as well
as profit to me. I never like to miss
a copy. It's the farmer's friend and
should be in the home of every
farmer; it keeps him in touch with
the practical farmers and the exper-
imental stations of the country, be-
sides being a fine medium through
which to buy or sell.

A. L. FLIPPO.

**HIGH GRADE
DROP-HEAD
LIGHT RUNNING
SEWING
MACHINE**

\$12.85

Positively the greatest Sewing Machine value
ever offered. By our direct selling plan, we
save you all dealers' and agents' profits. This
Machine is equal to
any usually sold by
agents for \$30.00.
It is substantially
made of best
material, and is
equipped with
the latest im-
provements. Ele-
gant oak drop-leaf
cabinet, 4 drawers
and full set of at-
tachments. We give
our binding 10-year
guarantee with each machine. Order one today, try it 30
days and if not found in every way satisfactory, we will re-
fund your money. We are the largest sewing machine dis-
tributors in the South, and make prompt shipment.
Send for complete catalogue mailed free on application.



Freight Prepaid
To Your Station.

MALSBY, SHIPP & CO.
Department 14, Atlanta, Ga.

Make Your Own Fertilizer
at Small Cost with
WILSON'S PHOSPHATE MILLS
From 1 to 40 H. P. Also Bone
Cutters, hand and power
for the poultrymen; grit
and shell mills, farm feed
mills, family grist mills,
scrap cake mills. Send for
our catalog.
Wilson Bros., Sole Mfrs., Easton, Pa.




COIL SPRING FENCE

Made of high carbon Steel Wire
Horse-high, Bull-strong, Chick-
en-tight. Sold direct to the
Farmer at lowest prices. Manu-
facturers prices on 30 Days Free
Trial, freight prepaid. 100 pages
Catalogue and price-list free.
KITSELMAN BROS.,
Box 14 MUNCIE, IND.



MANLOVE AUTOMATIC GATE

Saves time,
adds to value
safety, beauty
and pleasure
of home.
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Huron St.
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FENCE STRONGEST MADE. Bull-
strong chick-
en-tight. Sold to the user at Wholesale
Prices. We Pay Freight. Catalogue free.
COILED SPRING FENCE CO.,
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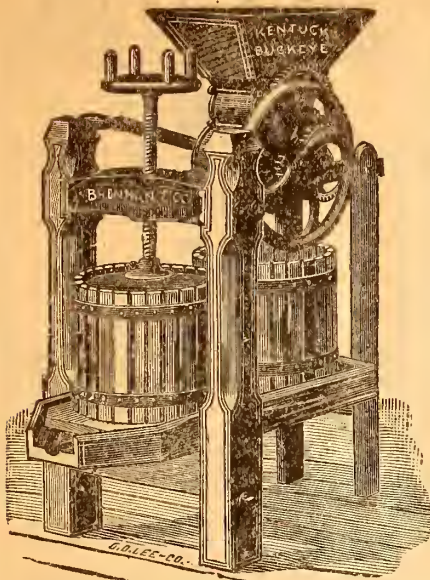
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45-in. stock fence per rod only
Best high carbon coiled steel spring
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Ten horse traction, \$250; 10 horse
portable, \$150; 12 horse portable, \$200;
1 horse boiler and engine, \$90; 1 horse
gasoline engine, \$40; 3 horse, \$60; 6
horse, \$125; 10 horse, \$175. Boilers and
Engines from 1 to 100 horse carried in
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THE LATEST IMPROVED AND THE BEST MILL ON THE MARKET.

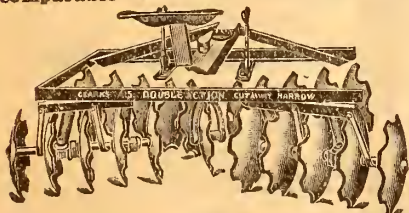
They cannot be surpassed in quality, finish, durability and capacity. They have hard wood frames, heavy cast iron beams, and are handsomely finished. The throat is adjustable so as to admit all sizes of fruit, and the grinding rollers are ground on the faces, are true to their centers, and are easily adjusted so close that no pulp can pass through without being thoroughly crushed. The grinding apparatus 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.

THE IMPLEMENT COMPANY.

1302 E. Main St., Richmond, Va.

DISC HARROWS AND DISC PLOWS.
Clark's Double-Action Cutaway Harrow—the greatest labor saver. Incomparable work.



Does in one trip what ordinary disc harrows cannot do in three and four trips.

A WONDERFUL INVENTION.



Clark's Double Action Combined Cultivator and Harrow. Can be used to cultivate rowed crops, as a listing harrow, also when closed together is a harrow cutting 4 1/2 feet wide.

These are the tools of to-day.

GUTAWAY HARROW CO., 45 Main St., Higganum, Conn.
ASHTON STARKE, Southern Sales Agent, Richmond, Va.

Tell the advertiser where you saw his advertisement.

A GOOD OPPORTUNITY FOR YOUNG MEN AND WOMEN,
In another column we are publishing an advertisement for the Gem City Business College. This is one of the leading schools in the Central West, and in many of the larger cities can be found graduates from this college who are holding important, high-salaried positions. In one bank alone in St. Louis there are thirteen graduates from this school.

The Simmons Hardware Co., St. Louis, employs nearly a score of G. C. B. C. graduates.

The Missouri Life Insurance Company, St. Louis, employs eight or ten G. C. B. C. students.

One bank in Kansas City, Mo., employs twelve students of this school.

The Quincy National Bank has all G. C. B. C. graduates, except the cashier. The president, vice-president, bookkeepers, tellers and clerks all being graduates of the Gem City Business College.

The Collins Plow Co., Quincy, employs practically all G. C. B. C. students—secretary, bookkeepers, bill clerk and stenographers.

More than 100 Business Colleges in the United States employ G. C. B. C. graduates as teachers of the commercial branches in their schools.

The school building is especially equipped, and, in fact, is like a big mercantile institution—pupils are taught actual business transactions, so that when the course is completed the pupil has had a practical training. Being located in a medium-sized city, board and room expenses are moderate. Read their beautiful 68-page illustrated catalog and get full information. It contains many letters of recommendation from pupils who are now in positions. The demand for pupils of this school exceed the supply, therefore, every scholar is assured of a good position after finishing at this school.

CATALOGUE DELAYED.

The beautiful catalogue of the Virginia Stock Farm Co., which was due off press about a month ago, has been unavoidably delayed at the hands of the printers. Mr. J. Elliott Hall, general manager, requests us to state that it will be out shortly and mailed to all inquirers whose applications are now on file. All parties who are interested in pure bred stock are requested to refer to the advertisement and send for this catalogue.

Davidson Co., N. C., Feb. 20, 1908.

I cannot get along without the Southern Planter.

H. J. CONRAD.

Washington Co., Va., Feb. 20, 1908.
I find many valuable suggestions in the Southern Planter.

M. BUCHANAN.

SHIP ME YOUR OLD METALS

HIDES

RUBBER

SCRAP IRON

Car Lots a Specialty

50,000

Hides Wanted

Write for Prices.
Satisfaction Guaranteed.
No Commissions.

CHECKS SENT SAME DAY FREIGHT BILLS ARE MARKED PAID.

Clarence Cosby,

Established 1890.

RICHMOND, VA.

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

REFERENCES:

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Harness That Stands Strain

It is worse than waste to let harness get dry, brittle and rotten. To stand the hard strain of daily use it must be made soft with

EUREKA Harness Oil

Clean the harness; let it absorb all the oil it will; wipe dry with a cloth, and your harness will be strong and tough as new leather.

Nothing like Eureka Harness Oil. Made by

STANDARD OIL CO.
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BARGAINS IN

2nd Hand Machinery.

THE WATT PLOW COMPANY,
Richmond, Va.

- 1—25 H. P. Gelsner Engine and Boiler on skids. In first-class order.
- 1—15 H. P. (8x10 cylinder) Pitts Engine and Boiler. Mounted on steel wheels.
- 1—25 H. P. Gelsner Engine. Mounted on 30 H. P. Boiler on skids. Almost new.
- 1—12 H. P. Kelly Engine and Boiler on wheels in first class order.
- 1—15 H. P. Frick Engine and Boiler on wheels.
- 1—No. 1 Lane Saw Mill with Richmond Iron Works Feed, 48-inch Inserted Tooth Saw and all necessary 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—8 H. P. Peerless Engine and Boiler on wheels.
- 1—2nd hand American Combined Lath Mill and Bolter; in first-class condition; used three or four months.
- 1—20 H. P. Gelsner detached Engine and Boiler with No. 1 Lane Saw Mill, 48-inch inserted tooth saw and all belt, &c. 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 Molder.
- 1—4-inch 4-Sided Molder.

—ALSO—

- 1—48-inch Inserted Tooth Simonds Saw.
- 1—54-inch Inserted Tooth Simonds Saw.

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

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

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

WASHINGTON NOTES.

Professor Spillman on Alfalfa as an Eastern Crop.

Alfalfa is undoubtedly a splendid forage plant where it will thrive without undue attention from man; it may be said to be the backbone of far western agriculture; but like many others promising field crops, it should be studied with reference to soil and locality before extensive planting. A great many eastern farmers have failed ignominiously with alfalfa, and on a large scale, when a little less enthusiasm and a little more careful testing would have been the part of wisdom.

"West of the 100th meridian," said Professor Spillman, the agriculturist in charge of "Farm Management," of the Department of Agriculture, in answer to an inquiry as to the department's present knowledge of alfalfa, "character of soil is but little considered in growing alfalfa; it will thrive anywhere that there is water. East of that line the plant is very discriminating as to its food. Wide experiments have been made by the various experiment stations and the Department of Agriculture all over the East, and in only a few circumscribed localities does it 'grow as a weed.'

In some sections of the South, in a small limestone region of New York and Southern Vermont, and in a few other scattered localities, it grows readily, while it also does very well in parts of Wisconsin, Minnesota and Illinois. But thousands of alfalfa fields in all the Eastern States have failed, and while it is now known that alfalfa can be grown on these fields, the cost is, in the majority of soils, prohibitive. Singularly enough, in most eastern soils, even limestone soils, lime applications are an essential." It is suggested by Professor Spillman that for anyone contemplating the planting of alfalfa, the trial be made on a small scale, half an acre or an acre, and that the following essentials be observed:

A fertile soil: application of lime at the rate of half a ton to the acre, broadcasting well inoculated alfalfa soil, 300 pounds per acre, and planting in August, with seed free from weed seeds.

"It should not be expected that in the East, the plant will endure and thrive twenty or thirty years as it does in the West," continued Professor Spillman. "If it would, the first cost of securing a good stand, however great, would be an inconsiderable quantity; but even where a good stand is secured, the usual life of the field is, on lighter soils, one or two years, ranging up to five years on heavy, rich soils, with as high as three cuts per year—except in the specially adapted localities above mentioned.

"There is a field of alfalfa at the Soldiers' Home, just out of Washing-

AGRICULTURAL LIME.

PLAIN ROCK

OR

SHELL LIME

BAGS OR BULK

SPECIAL FINE HYDRATED LIME

FOR DRILLING.

If in the market for any grade and any quantity of

LAND LIME

Write for our price list and particulars

T. C. ANDREWS & CO., Inc.

NORFOLK, VA.

Now is Your Chance

—FOR—

CHEAP LIME

Owing to extreme dullness in the building lime trade we will make low prices on our regular run of kiln "rock" lime until fall.

We have a few car loads of screenings left unsold.

Tazewell White Lime

Works

North Tazewell, Va.

Bone Phosphate

22½ per cent. Phosphoric Acid.

4½ per cent. Ammonia.

(Guaranteed Analysis.)

**A PURE ANIMAL BONE
FERTILIZER**

In the manufacture of which NO CHEMICALS are used.

Ton (2,000 pounds).....\$28.50

Sack, 200 pounds..... 3.00

RICHMOND ABBATOIR,

Box 267, Richmond, Virginia.

Offices: Sixth and Cary Streets.

Please mention the Southern Planter.

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THE SEED MERCHANTS

1705 East Franklin Street,
RICHMOND, VA.

We are headquarters for superior seeds of all kinds—Garden and Flower Seeds, Grass and Grain Seeds, Cow Peas, Field Beans, Millets, Sorghums, Fertilizers, Poultry Foods, etc. Your correspondence solicited. Write for our Free Catalogue.

NEW WARD BLACKBERRY

ONE OF THE BEST.

Fine stock of plants for fall delivery. Send for descriptive circular of the Ward. For other nursery products send for general price list.

**FRED SHOOSMITH, Hoyt, Pa., and
Chester, Va.**

Address either office.

FIVE MINUTE TALK

sent free. "How to Keep Away Chicken Lice and Mites" by only **ONE APPLICATION A YEAR.** Successfully used for upwards of 30 years.

**Carbolineum Wood Preserving Co.,
346 W. Broadway, New York, N. Y.**

FUMA

kills Prairie Dogs, Wood-Chucks, Gophers and Grain Insects. "The wheels of the Gods grind slow, but exceedingly small." So the weevil, but you can stop their grind with **FUMA CARBON BI-SULPHIDE** as others are doing. It fumigates poultry houses and kills hen lice.

Edward R. Taylor, Penn Yan, N. Y.

MARKET GARDENERS' PAPER
25 CENT SPECIAL OFFER ON
WEEKLY MARKET GROWERS JOURNAL
to Jan. 1, 1909. Regular price, \$1.00 a year.

Only paper printed exclusively for Market Gardeners and Truckers. R. M. Dunlap, Baraboo, Wis., says: "Just what I've been looking for all these years. One hint in it worth \$1 to me." Every number worth subscription price. Posts you thoroughly on everything connected with the gardening business. Order now. Stamps received.

MARKET GROWERS JOURNAL
522 Illinois Life Building, Louisville, Ky.

WANTED

- Bills to Collect -

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

Tell the advertiser where you saw his advertisement.

ton, which has seemed to yield well for a number of years past. Does not this speak well for the crop in the East?

"Some of the soils in the immediate vicinity of Washington," replied Professor Spillman, "are very well adapted to alfalfa, where the plant makes a pretty good crop the first year, and yields two and three cuts for the following three or four years, so that such fields are generally rated as successes; but my belief is that even in such instances clover would be a more profitable crop. After that length of time, however, the alfalfa becomes patchy, owing to crowding out by crab and blue grass. This statement should not, however, discourage further experimenting and testing, though as already stated, my advice to your readers would be to experiment on a moderate scale."

The possibilities of such experimentation should not be underestimated. In a recent issue Hoard's Dairyman says:

"It is just twelve years ago that the editor started in to determine if alfalfa could be successfully grown in Wisconsin. It took five years to arrive at a method suitable to the climate. Yet when that method was determined we found that it was just as successful and hardy here as in the most favored alfalfa sections of the country, and now hundreds of farmers are growing it who but a few years ago believed that was an impossibility."

Good Road Work In Brazil.

Brazil is bestirring herself over good road construction. All over the republic there are public enterprises for the construction of improved roads, or the improvement of old roads as a necessary adjunct to agricultural and other development of the country. It may be something of a surprise to the average reader to know that in its earlier days Brazil possessed some of the finest roadways in the world, the old government highways before the day of railways comparing favorably with the best government highways of Europe of the same period. It is a generally well recognized fact, in all progressive countries that good highways are one of the most important features of the general transportation problem, and transportation of farm products is the key to farm prosperity.

"Good road agitation and accomplishment in this country cannot progress any too rapidly, either by federal, State or local means, if American farms are to continue supreme.

Effect of Silage on Milk Flavor.

Among its various advantages, corn silage has come to the front in connection with the flavor of milk resulting from its use. The Department of Agriculture reports a test at the Illinois station where the dairy herd was divided into two lots, one

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.

Our Capital and Earned Surplus is

\$1,600,000

John B. Purcell, President.
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Chas. R. Burnett, Asst. Cashier.
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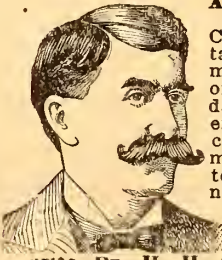
FARMERS Insure Your Buildings, Live Stock, Produce, Etc., in Virginia Division FARMERS' MUTUAL BENEFIT ASSOCIATION.

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

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

THE VIRGINIA LANDSCAPE AND MAINTENANCE CO. INC.

416 Watt, Rettew & Clay Building,
ROANOKE, VA.
Entomologists, Foresters, Landscape
Architects, Engineers.



A Great Discovery
DROPSY
CURED with vegetable remedies; removes all symptoms of dropsy in 8 to 20 days; 30 to 60 days effects permanent cure. Trial treatment furnished free to every sufferer; nothing fairer. For circulars, testimonials and free trial treatment write **Dr. H. H. GREEN'S SONS,** Atlanta, Ga.

ABRAMS PAINT AND GLASS COMPANY

RICHMOND, VA.

HOUSEHOLD PAINTS, GLASS,
SASH, DOORS AND BLINDS.

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

James Good, 959 N. Front Street,
Philadelphia.

THE VIRGINIA POLYTECHNIC INSTITUTE.

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

Fifty-six instructors, thoroughly equipped shops, laboratories and infirmary. Steam heat and electric lights in dormitories. Library of 10,000 volumes. Farm of eleven hundred acres. Degree courses in Agriculture, Horticulture, Applied Chemistry, Applied Geology, Civil, Mining, Mechanical and Electrical Engineering, Metallurgy and Metallography and Preparatory Veterinary Medicine. School of Agricultural 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.



Gem City Business College

QUINCY, ILL.

Annual attendance 1400. 20 teachers. Students from majority of states. Occupies its own \$100,000 specially designed, and equipped building.

Good Positions

await our graduates. Thorough courses in Short-hand, Typewriting, Bookkeeping, Actual Business Practice, Penmanship and Mathematics. Write for our beautiful illustrated catalogue giving full information free. **D. L. MUSSELMAN, President** Lock Box 130 Quincy, Illinois

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NATIONAL Business College
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The school with the reputation. Position for all graduates. Twentieth session opens Sept. 1st. Write to-day for free catalogue. Address

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MEDICAL COLLEGE OF VIRGINIA



Medicine, Dentistry, Pharmacy
Seventy-first Session begins Sept. 15, 1908
Graded first-class by the American Medical Association on the record of its graduates. Climate salubrious. Living expenses low. Write for terms and catalogue. **Christopher Tompkins, M.D., Dean, Richmond, Va.**

Please mention the Southern Planter.

of which was fed 40 pounds of corn silage per cow, daily, while the other lot was fed only clover, hay and grain. During the course of the experiment samples of milk from each lot were submitted to 372 persons for an opinion as to any difference in flavor, the testers being, of course, kept in ignorance of which milk was silage produced. The result showed that 60 per cent. readily preferred the milk from the silage-fed cows, 29 per cent. the milk from cows not fed the silage, while 11 per cent. could not make up their minds either way. This indicates a long white mark for corn silage for the dairy. The same cannot be said of all silage materials. Soy beans, for instance, are believed to impart a somewhat disagreeable taste to milk, whether fed just before or after milking.

Fertilizing Value of Straw.

In the great wheat belts it is often the practice to burn straw, in other sections straw is largely wasted. Straw has both a considerable feeding and a fertilizing value. In order to determine its fertilizing value experiments have been made by the Maryland Experiment Station. Fresh wheat straw was broadcasted at the rate of two tons per acre in the early fall and plowed down the following spring, and the following results were obtained:

The untreated land produced 34 bushels of corn per acre, and 16 bushels of wheat. The straw land produced 58 and 19 bushels, respectively, and the same land manured produced 86 bushels of corn and 22 bushels of wheat. The results show that while straw is not as valuable a fertilizer as manure, it will produce a considerable increase in yield, and should be used fresh where available, rather than allowed to go to waste.

The Value of a Good Garden.

Not everyone realizes the great value of a thrifty, well-kept garden. Even an inferior one is much better than none. Vegetables are indispensable to a family, so far as health is concerned, to say nothing of the money saved by not having to buy so much flour and so many canned groceries. It would seem that every man should manage to obtain a piece of ground and see that it becomes well fertilized and enriched, and then put under a thorough state of cultivation before trying to plant the seeds. But it should be remembered that it takes as much work for a poor as it does for a good garden.

Fine Peruvian Cotton.

Efforts are being made by the Department of Agriculture to introduce in the South, the fine, long staple cotton of the Incas.

Cotton growing in Peru dates back to prehistoric times, and it is quite a common occurrence to bring to light

United POULTRY SUPPLIES

Poultry-raisers have found that the better the incubators and brooders they use, the better the foods they feed, the more money they make, and the more pleasure they get out of their fowls. We want to supply you with the better incubators and brooders, foods and supplies. We manufacture and market the best goods in the world in our line. The "United" incubators and brooders—standard the world over, and favorites with poultry people—are our leaders in the machine line. "Banner" and "Fidelity" Foods need no argument to convince you of their merits. We manufacture and guarantee them. By buying all your supplies at one place you will save on freight, and will always get a quality you can depend on. Send us your orders and save money. Before you buy elsewhere write for our free catalogs. Do it to-day. **United Incubator & Poultry Supply Mfg. Co., Dept. 17** 26-28 Vesey St., N. Y. City.

METAL MOTHERS. Complete Fireproof Hatching and Brooding Plant for \$7.50; two quarts of oil will hatch and brood the chicks. Our nest system is the latest discovery. Full line of poultry supplies. Low-est prices. Free catalogue. Write to-day. **CYCLE HATCHER CO.,** Box 409, Elmira, New York.

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Send sketch for free report as to patentability. Guide Book and What to Invent, with valuable list of inventions wanted sent free. One million dollars offered for one invention; \$16,000 for others. Patents secured by us advertised free in World's Progress. Sample free. **EVANS & WILKENS,** 545 F Street, Washington, D. C.

"Feeds and Feeding"
AND
The Southern Planter
for only \$2.25, including delivery of the book. This is Professor Henry's great work on Feeds and Feeding Stock and is the recognized standard everywhere. Every one with half dozen head of stock should have it.
Southern Planter,
Richmond, Va.

State Female Normal School
Twenty-fifth session begins September 9th. For catalogue and information concerning State Scholarships, write to **J. L. JARMAN, President.** Farmville, Va.

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 running through the farm. The land is all in a good state of cultivation, chocolate clay with stiff subsoil. The house is a comfortable 6 room dwelling, excellent 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 soil; fine for grass and grain of all kinds; situated in Loudoun County, 24 miles from Washington, three-quarters mile from macadam road leading into the city. Land is a little rolling, but would be considered level; fenced into ten fields; 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.

No. 191. Consists of 475 acres, 300 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-failing 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 six horses, and other small outbuildings. 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 Fairfax County, 20 miles from Washington, six miles from Herndon station. The land is in good condition and is making 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.

Farm No. 76. Contains 243 acres, 25 acres in good timber, balance is cleared and well 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 clover 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 stretch of cultivated lands. This farm 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 preserved. Fine water. There are all the necessary outbuildings, in good condition. Horse barn with stalls for 10 horses and cattle barn with stalls for 25 head. Excellent orchard of all kinds of fruit. This farm is one mile from railroad station. Price, \$37.50 per acre.

Send for my new List.

WM. EADS MILLER, HERNDON, VA.

fine specimens of cotton textiles, in digging up ancient Inca graves.

Pizarro was astonished at the fine cotton cloth worn by the Peruvians. At various times subsequent to the conquest foreign varieties of cotton—Egyptian, Argelian, Sea Island, Metaffi—have been introduced among the plantations, but the distinctly Peruvian variety, the Peruvian rough of commerce, still commands superior prices abroad. Exports are chiefly to England and the United States. The famous Peruvian rough, however, does not take kindly to cultivation in all parts of the republic, Ica and Plura being the regions where apparently it thrives best.

The variety called locally "Egyptian," which is our "Upland" of the United States, grows readily in the coast region of Peru. The Argelian variety is less adaptable to local conditions, and suffers greatly from a prevalent blight, the bane of cotton planters, which is locally known as "hielo" (frost). It is probably of bacteriological origin. The Metaffi (Yanovitch) and Sea Island are grown in spots along the coast chiefly at Supe and Huacho, near Lima, for export chiefly. The limitations of the local mills form the chief reason for the more prevalent selection of the variety known as Egyptian, which is more easily worked than the others.

Cheap Preservation of Posts and Poles.

One of the most practical plans which the Forest Service has worked out is what is termed the "open tank" method of treating timbers, a result of experiments conducted to obtain some cheap and simple process of wood preservation adapted for timber in common use, for which the pressure methods are too expensive. The Forest Service has issued a small bulletin (Circular 101) which will be sent free on application, in which are given descriptions of the necessary apparatus, together with diagrams of experimental tanks for treating fence posts, telephone poles, and mine timbers, as well as a diagram of a small commercial plant. In this circular consideration is given to the history, description, theory, and methods employed in the open-tank process, with its application and limitations.

The open-tank method is based upon the use of an open tank, capable of withstanding heat, and either equipped with steam coils or so arranged that a fire can be placed underneath. Extensive experiments by the Forest Service with fence posts, telephone poles, and mine timbers have given satisfactory results, and it is believed that any of the preservatives in general use can be applied by the open-tank method for the treatment of fence posts, telephone poles, mine props, small dimension timber, cross-ties, piling, and similar timbers.

The fat contained in food-stuffs can only serve as a fuel or energy produc-

CHEAP A FINE STOCK FARM

\$10,500—315 acres with crops, stock, and all necessary farm implements.

Near Leesburg in a good neighborhood near schools, churches, stores, etc.; not far from river; 75 acres in fine timber; good blue grass soil in a good state of cultivation; yields barrel of corn to shock; half of farm level, balance rolling but not hilly with the exception of one field; good fencing; farm divided into 5 fields, with spring in each; wind mill supplies water for house and barn; close to public road; R. F. D. every day.

Large brick house in fine condition, beautifully located on a high hill, with lawn, and fine shade trees; brick barn in good repair; 2 room brick tenant house. Ice house, 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 and timothy; 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.

200 acres near Herndon, railroad and thriving town, on macadam road, 27 miles from Washington; 130 acres under 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 section. Price, \$15,000; \$3,500 down, balance on easy terms.

300 acres, 7 miles from rail; R. F. D.; 280 acres cleared; 200 acres in grass—part fine blue grass. Springs in every field. This place can be divided into 2 farms; either place can be bought separately, if desired. 2 good houses, tenant house, blacksmith shop, 2 barns, hay houses, and a number of other small buildings; a fine orchard of apple and other fruit trees—a fine fruit section. A good stock farm. Price, \$10,000.

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 buildings; 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 bargains in the county.

254 acres, 3 miles from rail; 54 acres in timber; an excellent sheep and hog farm; 7 room house; barn and outbuildings in good condition; very finely watered by running streams; blue 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 cultivation. 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 neighborhood. The owner has just authorized us to sell this farm for \$5,575 in order to make a quick sale, as she has been compelled to go West, 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.

**COMPLETELY STOCKED
AND
FINELY EQUIPPED FARM
FOR SALE.**

A fine farm in Loudoun County, all ready for business. Stock, crops, farm implements, and household furniture go with farm, for only \$10,500.

227 acres of good land $3\frac{1}{2}$ miles from rail; 62 acres in timber; 25 acres corn; 30 acres wheat; 11 acres oats; peas and rape, 40 acres; ground rolling, good clay loam; 8 springs and 1 stream. 60 acres has been limed within two years.

Good stone house of 8 rooms with slate roof; ample grounds and large garden; stone meat and spring house; barn and cow stable in good condition; large double corn house.

**Inventory of Personal Property at
Lynnwood Farm.**

Three heavy mares	\$405
Mare and foal	160
Brown mare, 4 years.....	200
Bay gelding, 3 years	200
Yearling	75
63 ewes and 26 lambs	356
Two bucks	10
Seven brood sows	70
Four shoats	25
38 Pigs	100
Two cows	80
One calf	10
Chickens	15
Team Harness	100
Two sets single harness	20
Six sets plow harness	9
One wagon body	15
One running gear	25
One binder	30
Corn planter	5
One dayton	40
Two harrows	15
One plow	9
Two cultivators	10
Drag, \$3; double shovel plow, 2	5
Sundries	20

\$2,009

Household furniture in good oak and maple. Parlor suite of 5 pieces never been used. Bedding, Carpets and mats, Stoves, Lamps, all kitchen utensils, knives, forks etc. All China and Table Linen in use. \$350.

Crops on farm:—Wheat about 375 bushels. Cats 11 acres, sown for hay. Cowpeas and sorghum, 12 acres.

Stock farms in Northern Virginia a specialty.

To avoid possible delays kindly write or telephone us when to meet you.

**P. B. BUELL & SON,
Herndon, Va.**

FARMS For Sale.

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

**W. W. BARNES & CO.,
LAND AND TIMBER AGENTS,
Amelia Courthouse, Va.**

VIRGINIA FARMS

Farms of any size with improvement
Prices in reach of all. Free list.
PORTER & GATES, Louisa, Va.

er, or to build fatty tissue. Fatty tissue furnishes potential energy and is a reserve fuel supply for the animal. Protein may also in a case of need serve as an energy produced, and may be used to form fat, but the use for such purposes is uneconomical.

Everyone who has tried it knows that pigs will thrive on clover pasture. They eat it with relish and tramp less than cattle. With a good clover run during the summer they will finish into fine pork by Thanksgiving.

GUY ELLIOTT MITCHELL.

THE LYNCHBURG FAIR.

The record-breaking attendance at the third fair of the Interstate Fair Association, of Lynchburg, Va., (Incorporated), held October 1, 2, 3 and 4, 1907, was most gratifying to the management, and has encouraged them to put forth greater efforts for the fourth fair, to be held September 29 and 30, and October 1 and 2, 1908. "Greater efforts" alone will not accomplish all that is desired; but, these backed with the expenditure of more money will produce results. In every department of the premium list changes and additions have been made, with a view to bringing out better and more exhibits.

In the Live-stock Department the premiums offered for classes in which home breeders can exhibit have been materially increased, and two exclusive local classes will be found for cattle. The premiums for heavy draft horses have not only been made more valuable, but nine gold medals and a championship cup, valued at \$100, are offered by the Percheron Society of America, and the same will be found in the Angora goat class, where another handsome silver cup is offered by the American Angora Goat Breeders' Association.

In poultry, premiums have been added for a number of breeds which have not hitherto been recognized.

In the children's department every species of work done in the public school is represented by an award, or by several, and the ladies' departments have been revised by experts, and in that of fancy needlework alone, forty new premiums are offered, including, it is believed, every known class of work.

The domestic science, agricultural, and horticultural classes have been carefully revised, changes being made so as to ensure more exhibits, by making larger premiums and such classification as will make competition less difficult. In each department the awards are made by paid expert judges.

The racing last year was the best ever held in Lynchburg, but, from the entries already received for the stake races, and the reports from the most reliable sources, the management feels safe in predicting that there will be

ATTENTION

HOMESEEEKERS 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 Business Places of all classes. The reason I make a specialty of the two suburban counties—Loudoun and Fairfax—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 accessible to Washington and Alexandria cities by rail and pike, which gives all producers a fine home market.

My facilities for locating you in this section of Virginia are second to none. State what kind of property would interest you. I have a large number and great variety of properties, and can very likely suit you. New catalogue and map mailed free on request.

W. H. TAYLOR, Herndon, Va.

VIRGINIA FARMS

Healthy Productive Section.

Land, climate and seasons conducive to successful farming in all of its branches. Electric and steam railroad facilities. The big Northern and Southern markets reached in a few hours.

FRANK H. COX.

Resident Agent, ASHLAND, VA.

A DELIGHTFUL

VILLAGE HOME

In the thriving town of Herndon, Va. Eight acres of land near station; ten-room house modern improvements, sanitary plumbing bath, etc.; 90 feet of veranda; shaded lawn; bored well at door; excellent water; good stabling and poultry quarters; some choice fruit.

This is an excellent house and ought to interest the best class of families seeking country homes. Prompt possession.

Also, a village farm of 20 acres near station in Herndon; 8-room house, stabling, artistic grounds, lawn and shade; excellent water; fruit in abundance (apples, pears and grapes).

Herndon is located in beautiful plateau region one hour from and four hundred feet above Washington on the Bluemont division of the Southern Railway. No typhoid; no malaria; no mosquitoes.

P. B. BUELL & SON,

Real Estate Brokers,
Herndon, Fairfax Co., Va.

"In the Green Fields of Virginia."

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

MACON & CO., ORANGE, VA.

STOCK FARMS

496 acres—The best stock farm in Fairfax Co. in a good neighborhood, at only \$21 per acre. 200 acres in valuable timber, mostly oak; balance in crops and grass; 11 never-falling springs. 5 miles from Clifton station, on the Southern R. R.; 7 miles from electric line at Fairfax Court House; 9 miles from Herndon on the W. & O. R. R.; 29 miles to Washington on Warrenton pike; one fourth mile from Centerville, where there are churches, schools, mills, stores, blacksmith shop, etc.; R. F. D. at door every day; 4 miles from Bull Run battle field. Only farm for sale between Chantilly and Centerville pike. Considered the best fruit farm in this section—a large apple and peach orchard in first class condition, loaded with fruit; 20 acres in wheat; 25 acres oats; 35 acres corn; 80 acres meadow that will average 2 tons of hay per acre. If sold within 30 days, crops will go with place, without extra cost. Good clay soil; just rolling enough to drain well.

Two houses and two barns—new house of 8 rooms and cellar, and new barn, situated on main road; other house of 5 large rooms and cellar with good barn, beautifully located near the center of the farm; all necessary outbuildings; a beautiful view of the Blue Ridge mountains from this farm. The timber alone will half pay for the farm. Owner has good reasons for selling.

If desired will subdivide and sell 400 acres, including the 200 acres in timber, with the 5 room house and barn, for \$6,500, or will sell the 100 acres with the new house and barn, including the fine orchard, for \$4,500.

Being so close to Washington markets makes this place very valuable as a stock farm.

Stock farms in Northern Virginia a Specialty.

P. B. BUELL & SON,
Herndon, Virginia.

LUMBER-MAN FARMER. COAL-MAN ATTENTION!

My new 1908 land book is ready. It contains some 150 descriptions of

TIMBER TRACTS,

Farms, Town Properties and Lots, Iron and Coal Lands.

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,
Goshen, Va.

Old Virginia Farms.

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

CASSELLMAN & COMPANY,
RICHMOND, VA.

Farms, Orchards, Timber,

Cotton Lands in Virginia and the South
ALBEMARLE IMMIGRATION SOCIETY, Charlottesville, Va.

Please Mention the Southern Planter.

many more horses at the fair this year than last year, and even better records will be made.

At considerable cost the Association has arranged with Mr. Charles J. Strobel, of Toledo, Ohio, to exhibit daily at the fair, one of his prize-winning air-ships, which will make two ascensions daily, and one at night, besides being on exhibition at all times where visitors can examine it closely. Mr. Strobel has won prizes with his air-ships at the St. Louis, Portland, and Jamestown expositions, besides having made successful flights at the leading fairs in this country and at festivals in Mexico and Cuba. His air-ship is one that will navigate the air, and can be guided at will by the operator. This feature alone will be worth a visit to the fair.

Among the free attractions to entertain the public between the races will be a troupe of Japanese acrobats and performances by trained wild animals. In addition to this a contract has been made with a well-known amusement caterer to bring a full line of side-shows to fill the entire Midway and to give every visitor an opportunity to find entertainment and pleasure for every moment spent at the fair.

On the nights of Tuesday, Wednesday and Thursday, there will be superb displays of fireworks by the A. L. Due Fireworks Company, of Cincinnati, whose magnificent pyrotechnic displays last year were voted the best ever seen in this State. The programme promised by the company for this year is even more brilliant than that of 1907, and the fire-works, as usual, will be a great feature.

Many improvements have been made to the grounds since last year, chief of which may be mentioned a connection with the new gravity water system of the city, by which it is confidently expected that a full supply of clear, cool water will be furnished at all times. There are four railroads to the city, and two street-car lines to the fair grounds. Premium lists can be obtained by writing to F. A. Lovelock, secretary, Lynchburg, Va.

WORKERS WHO WANT WORK.

The Free Labor Bureau of The Bowery Mission has, within the past four months, sent over 1,300 men to country districts in response to the appeals of farmers for field laborers, but still has on hand many hundreds of common laborers, farm hands, general handy men, and mechanics skilled in almost every branch of industry.

The Bowery Mission carries on this important work absolutely free of charge, and without regard to creed or nationality. All who are in need of workers for the harvesting should communicate with John C. Earl, Financial Secretary of The Bowery Mission, 54 Bible House, New York City.

Wanted--To Exchange

Washington, D. C. property having yearly rental over \$10,000 for a large grazing farm in Piedmont, Va. One finely improved with residence, and stables, etc., preferred. Address with full particulars "Hom'e" care Planter Office.

MARYLAND AND VIRGINIA

FARMS NEAR WASHINGTON.

Unsurpassed as money-makers; best place on earth for farmers, dairymen, stockmen or poultry men; mild climate, best markets in country; highest prices; no such word as "Fail" for industrious man. Big bargains here now. 2,500 places to select from. Catalogue free.

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

FOR RENT.

180 ACRE FARM

2 1/4 miles from Salisbury, North Carolina. Good road, good water, healthful location. Eighty acres in cultivation, good soil, 30 acres fine meadow, ditched and well drained. 1 acre strawberries, 3-year-old orchard. Two sets of buildings. Fine location for dairying and trucking. Will give 5 year lease to responsible party recommended.

D. W. BURRIGHT, Salisbury, N. C.

Virginia Farms

Handsome Country Homes and High-Grade Farm Lands a Specialty.

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IF YOU WISH TO LOCATE IN LOUDOUN COUNTY

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Published By
DeL. S. CRITTENDEN,
Real Estate Broker,
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MOST SELECT LIST, and in all sections of the State.

FREE CATALOGUE.

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

BARGAINS Near Washington.

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 outbuildings. A very fine orchard. Cheap at \$15,000.

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

Stock farms in Northern Virginia a specialty.

Write or telephone us what you want.

P. B. BUELL & SON,
Herndon, 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.

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 Bluff, Va.

REAL ESTATE FOR SALE.

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

GEO. E. CRAWFORD & CO.,
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FARMS.

Mineral and Timber Lands.
Free list on application.

W. A. PARSONS & CO.,
1527 East Main St., Richmond, Va.
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190 Acre

FARM FOR SALE.

At a bargain. 3½ miles from Saxe Station in Charlotte Co. Well located, convenient to schools, churches, mills and stores. Price \$4 per acre, time given to suit purchaser.

W. M. WATKINS, Saxe, Va.

POULTRY FARM

for sale. I intend to devote all my time to other business and offer my farm of 37 acres in Hanover Co., Va., for sale. Write me for particulars and price. Will give a quick buyer a bargain.

CAL HUSSELMAN,

Tell the advertiser where you saw his advertisement.

THE FIRST ANNUAL ROUND-UP FARMERS' INSTITUTE—FARMERS' SUMMER SCHOOL.

At Clark University, August 3rd to 8th, Inclusive.

There are in the State of Georgia 18,700 Negro farm owners, 35,250 Negro cash tenants and 36,889 Negro share tenants. Thousands of these Negro farmers, in all three classes, want to change their system of farming and raise their standard of living, but they do not know how to do it.

Again, there are 117,000 male Negro farm laborers and 72,000 female farm laborers, a total of 189,900 Negro farm laborers with an earning power of \$147 per year each. These laborers have nothing to inspire them with a love for their work. We must have this people to see farming in its true light and realize that it is not a round of toil and drudgery, but a calling that can be made to pay well.

In the first time in the history of the State of Georgia an opportunity is being given to the Negro farmers to attend school for one week and be taught the latest methods of farming and improving their conditions. For this purpose the authorities in charge of the movement have succeeded in securing the services of several agricultural experts.

A partial list of the instructors that have been secured is given below:

Two lectures—Farm Garden and Orchards, Prof. J. G. Oliver of the Seventh District Agricultural School, Powder Springs, Ga.

Two lectures—The Plow, Its Care, and Adjustment, Mr. J. B. Butler of the Chattanooga Plow Co., Chattanooga, Tenn.

Five lectures—Fall and Winter Plowing, Prof. H. E. Stockbridge, of the Southern Ruralist, Atlanta, Ga.

Three lectures—The Best System of Renting Farm Lands Editor G. G. Hunnicutt of the Southern Cultivator, Atlanta, Ga.

Two lectures—Management of Farm Labor, Prof. P. C. Parks, Superintendent of the Agricultural Department of Clark University.

Three lectures—On the Selection of Cotton and Corn Seed for Planting, Mr. E. Gentry, of the Bureau of Plant Industry, Washington, D. C.

Two lectures—Caring for and Feeding a Dairy Herd, Profs. C. L. Wiloughby and P. N. Flint of the Southern Experiment Station.

Three lectures—On the Improvement of the Cotton Plant, Prof. G. W. Carver, Director of the Agricultural Department, Tuskegee Institute.

Two lectures—On How to Extend the Rural School Term, by Prof. C. J. Calloway of Macon County, Ala.

Two lectures—On Harvesting the Corn and Cotton Crop, Associate State

"RARVA" MEAT MEAL.

Poultry Food.

85 per cent. Protein. 7 per cent. Fat. ECONOMIC, PURE, APPETIZING, AND WHOLESOME.

WILL KEEP INDEFINITELY.

Sack 100 lbs., \$3.00.

AN IDEAL FOOD TO FEED WHILE MOULTING.

Sample on Request.

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SAMPLE FREE

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Conkey's Lice Powder

Kills instantly and is harmless to the fowl. Send 5 cents for postage and get sample and also Valuable Poultry Book FREE.

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428 OTTAWA BLDG., CLEVELAND, OHIO

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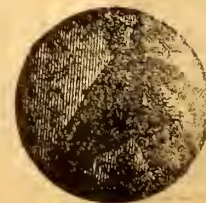
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OWING TO OUR DISPERSION,

SOME BURKES GARDEN LAND, SHORTHORN CATTLE, SOUTHDOWN SHEEP, STANDARD POULTRY AND VARIOUS EQUIPMENT WILL BE SOLD AT FIGURES IT PAYS TO LOOK INTO AT ONCE. W. B. DOAK, MGR., B. G. C. CO., TAZEWELL, VA.

P. S. LIKE TO HEAR FROM STOCK FARMER, BREEDER, OR DAIRY IN NEED OF FOREMAN, OR PARTIES WITH CONVENIENT, WELL IMPROVED FARM TO RENT WITH PRIVILEGE OF BUYING PARTICULARS AND PRICE.

JACKS and SADDLERS



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.,
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Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with

**Fleming's
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—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

**Fleming's Vest-Pocket
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Best veterinary book for farmers. Contains 192 pages and 69 illustrations. Durable bound in leatherette. Write us for a free copy.

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ABSORBINE

Removes Bursal Enlargements, Thickened Tissues, Infiltrated Parts, and any Puff or Swelling; Cures Lameness, Allays Pain

without laying the horse up. Does not blister, stain or remove the hair. \$2.00 a bottle, delivered. Pamphlet I-C free.

ABSORBINE, JR., for mankind. \$1.00 bottle. Cures Syphilis, Weeping Sore, Strains, Gouty or Rheumatic Deposits, reduces Varicose Veins, Varicocele, Hydrocele. Allays pain. Book free. Genuine mfd. only by **W. F. YOUNG, P.D.F., 109 Monmouth St., Springfield, Mass.**

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placed anywhere, attracts and kills flies. Neat, clean, ornamental, convenient, cheap. Lasts all season. Absolutely harmless, cannot spill or tip over, will not soil or injure anything. Guaranteed effective. Of all dealers or sent prepaid for 20 cents. **HAROLD SOMERS**, 149 DeKalb Ave., Brooklyn, N. Y.

ONSTAD'S "ONE APPLICATION CURES" LUMPY-JAW CAPSULES

GUARANTEED. WRITE FOR PARTICULARS. **THE ONSTAD CHEMICAL CO., 101 Key Street Indianapolis, Ind.**

PRUSSIAN COUGH & DISTEMPER CURE

Cures Cough, Distemper, all Throat and Lung Troubles. Purifies the blood. Puts the animal in condition. 50c. **Prussian Remedy Co., St. Paul, Minn.**

A Year's Subscription to THE SOUTHERN FRUIT GROWER.

FREE.

Every reader of The Southern Planter who subscribes or renews his subscription to The Southern Planter during the next sixty days will receive FREE for the asking a year's subscription to the Southern Fruit Grower. Contains from 32 to 40 pages monthly. Devoted to fruit growing in the South. Remember that you can get two papers now for the price of one—50 cents. If you desire a sample copy of the Southern Fruit Grower write them at Chattanooga, Tenn., and send orders to us.

**THE SOUTHERN PLANTER,
Richmond, Va.**

Agent Davis of the Bureau of Plant Industry, Washington, D. C.

One lecture—On How to Keep the Boys on the Farm, Prof. J. M. Collum, Principal of the Third District Agricultural School, Americus, Ga.

Two lectures—On Keeping Your Farm Neat and Attractive, Prof. J. N. Rogers, Principal of the Tenth District Agricultural School.

Two lectures—On the Raising of Poultry on the Farm, Dr. W. J. Yates of Gammon Theological Seminary, Atlanta, Ga.

Two lectures—On Insects Injurious to Farm Crops, Prof. Z. Hubert, of Spelman Seminary, Atlanta, Ga.

In addition to the above, Hon. T. G. Hudson, the State Commissioner of Agriculture, will address the Institute.

At this Farmers' Institute we wish to devote one day to the teachers of the rural schools among the Negroes. A representative of the Jeans Fund will be present to address the teachers as to the conditions under which the various schools may receive aid from this fund. No rural school teacher can afford to miss this opportunity. Mr. C. J. Galloway of Macon County, Alabama, who has done so much to extend the rural term of his county, will address the Institute on the work that he has accomplished. Come and bring some of your patrons with you.

The expenses for those attending this Institute will be 50 cents per day or \$3.00 for the whole week. This amount includes board, room rent and tuition. The rooms of the students who are now out on their vacation will be prepared for the visitors and all are expected to eat in the dining hall.

An old fashioned free barbecue will be given on Saturday, August 8th. All of the farmers attending the Institute are invited to be present.

IOWA'S FENCE POST BILL.

An annual fence post bill of more than \$1,250,000 is one item in the expense account of the farmers of a single agricultural state. It is estimated that the farmers of Iowa use posts having a value exceeding this enormous sum each year to maintain the fences on the 25,000,000 acres of improved land in the state.

In making these estimates, H. P. Baker, formerly professor of forestry in the Iowa State Agricultural College at Ames, and now occupying the chair of forestry at Pennsylvania State College, figured that the farms of the state required 78,000,000 posts for fences, or 2,000 to the square mile. Placing the value of the posts at 15 cents each, the cost of renewal every eight or nine years, which is the life of the post, is \$11,718,000, making an annual bill for renewals of \$1,465,000.

Like many other farming states,

You Can't Talk it too strong. What?

Gombault's Caustic Balsam As a Liniment For the Human Body

Springfield, O., Sept. 19, 1904.

Lawrence-Williams Co., Cleveland, O.—Lewis Evelsizer, Urbana, R. F. D., a farmer, had a bad cancer on back of his hand. When I first saw it he was on his way to have his hand amputated. I persuaded him to first try GOMBALT'S CAUSTIC BALSAM, which he did, and on second application could rest well at night—the first for weeks. In less than three months he was at work on the farm. He will certify to this statement over his signature. Then Mr. Jenkins, storekeeper and postmaster at Seth, O., had a bad cancer on his cheek-bone. I saw him at a grange meeting and told him to use CAUSTIC BALSAM twice a day, rubbing it in for five or ten minutes. In three months it was healed over and is now all sound. These two are all that I have the address of just now. I have had CAUSTIC BALSAM used on old shin sores. One man had walked with crutches for more than a year, and several pieces of bone had come out. I persuaded him to try CAUSTIC BALSAM, and today you would not know he was ever lame. Then, it is a sure cure for piles, using it with sweet oil. I could tell of dozens of cases where I have induced different ones to use CAUSTIC BALSAM. I have seen the means of more than fifty bottles being bought, because I know just what it will do. You can't talk it up strong enough. I wish you success.

R. L. HOLMAN,

In charge Co-operative Work of Ohio State Grange.

Price \$1.50 per bottle. Sold by druggists, or sent by us express prepaid. Write for Booklet H.

The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.



Use the old, reliable, standard remedy "Bickmore's Gall Cure" and beware of imitations. Every genuine package bears the above trade mark of the working horse, and if you are not satisfied after using it according to directions, dealers are authorized to refund your money.

Bickmore's Gall Cure

cures open sores, cuts and abrasions of every description promptly and speedily. Does not interfere with working the animal. Try it. Sample with full directions and Bickmore's New Horse Book mailed for 10c.

BICKMORE GALL CURE CO. Box 935, OLD TOWN, Maine

BEST ON EARTH



Don't experiment. You can make and keep your horses sound with the time-tried

Kendall's Spavin Cure

For much more than a generation it has been the great cure for Spavin, Ringbone, Curb, Splint, Swellings, Sprains and Lameness.

"I have used your medicine nearly 40 years. A horse with two bog spavins at the end of four months, was as smooth as the day he was foaled."
John Smith, Johnville, Que.

Also a great family liniment. \$1 a bottle, 6 for \$5. All druggists. Free book, "Treatise on the Horse."

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



NEWTON'S Heave, Cough, Distemper and Indigestion Cure. A veterinary Remedy for wind, throat and stomach troubles. Strongly recommended. \$1.00 per can, of dealers, or exp. prepaid. The Newton Remedy Co. Toledo, Ohio.

N&W FARM

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,
Norfolk & Western Ry. Farm, Ivor, Va.



"RINGLET"

BARRED PLYMOUTH ROCKS

EXCLUSIVELY.

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.



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

The finest lot of young chicks I ever raised, fast coming to maturity, nicely marked. Correspondence cheerfully answered. Circulars free.
CHARLES C. WINE,
Mt. Sidney, 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 fertility. My stock is excellent.

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

High-Class

PEKINS

March and April hatched (early egg producers) and yearlings for sale.

S. C. White Leghorn Cockerels,
March hatched, from eggs from Fogg's Yards, Kentucky.
WM. BUGBEE, Palmyra, Va.

CLOSING OUT SALE.

Of S. C. W. Leghorns, and we are also booking orders for White Wyandottes, W. H. Turkeys, White Guineas, White China Geese, Pekin and Wild Mallard Ducks. All first class stock and cheap.

WHITE POULTRY YARDS,
Lorraine, Va.

Iowa has a lack of fence post material, but there is little excuse for this condition according to the foresters who have made studies in the state. A properly managed forest plantation will produce, when the trees have reached post size, 3,500 posts, 3 to 5 inches in diameter per acre; thus it would take 22,350 acres about every ten years to grow the necessary posts to supply the state. Iowa is said to have 200,000 acres of planted timber, and yet the fence post supply is insufficient. If properly cared for, many of these plantations can be made to produce more timber, and thus insure the fence post supply.

These 200,000 acres are not at present furnishing the posts which it is estimated can be grown on 22,350 acres of properly handled forest land. This in itself is an astonishing statement, but there are several reasons for such a condition. They have been summed up under the three following heads:

1. Failure to select species suited to the region and the land to be planted.

2. No protection against stock. It is impossible to make land produce both first-class stock and first-class trees at the same time. The animals eat the terminal buds of the young trees, pack the soil so that it will not take up the rain, and break and bruise the trees, opening them to the attack of insects and fungi. The trees shade out the grass and reduce its forage value.

3. Lack of protection against fire. Many fine plantations have been ruined by permitting surface fires to run through them. Fire protection, which is often given by plowing two or three furrows about the plantation, is especially important after the trees have reached such a size that they no longer receive cultivation, as the litter and brush form a dangerous fire risk.

Rappahannock Co., Va., Feb. 17, 1908

I find the Southern Planter full of information for the farmer, stockman and poultryman.

THEO. M. ROHR.

McDowell Co., N. C., Feb. 17, 1908

I do not think the Southern Planter has an equal in farm papers.

B. C. BROWN.

Richmond Co., Va., Feb. 17, 1908.

The Southern Planter is the finest paper of its kind I have ever read.

MRS. J. E. JOHNSON.

Fairfax Co., Va., Feb. 20, 1908.

The Southern Planter is the best of all agricultural journals I have ever read.

C. H. KEMPER.

BUFF ORPINGTONS

60 S. C. Buff Orpington yearling hens, 1908 breeders (all good) \$1.50 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 cocks at \$1.00 each. 1908 hatched.

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.

SPECIAL

PURE BRED Buff Orpingtons

Famous Willow Brook strain. Having raised more than we care to carry will sell pullets and cockerels four and five months old for \$1 each. Send your order at once. Only a limited lot to offer.

ALBERENE ORPINGTON YARDS,
Alberene, Va.

Glenview Orpingtons.

S. C. BUFFS EXCLUSIVELY.

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

B. S. HORNE, KESWICK, VA.

Royal Reds—Orpingtons.

Fine yearling hens and early hatched cockerels of the best egg producing and prize winning strains of R. I. Reds and Buff Orpingtons. Large beautiful hens in excellent laying condition. Locust Mount Poultry Farms, Geo. W. Sweeting, Sharon, Harford Co., Md.

RHODE ISLAND REDS. BOTH COMBS.

Eggs from pure-bred, high class stock at \$1.50 per 15, \$2.50 per 30 and \$4.50 per 60.

Also a nice home and store for sale or rent. Main building has 14 rooms. All necessary outbuildings. The whole nearly new. Write

CLINTON HENSLEY, Prop. Elkton Poultry Farm, Elkton, Va.

MISS LOUISE V. SPENCER,
Blackstone, Va.

Headquarters for Pure-Bred

R. C. Rhode Island Reds

Eggs for Hatching. Stock.
Member R. I. Red Club.

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.

DeWITT'S FINE POULTRY CATALOG.

Sixty varieties of Pure-Bred Poultry. Illustrated. Prices of stock and eggs upon request. Catalogue 10 cents, redeemable on first order.

DeWITT POULTRY FARM,
Highland Park, Richmond, Va.

Poultry For Sale.

I will sell nearly all of my flock of poultry, S. C. B. and S. C. W. Leghorn pullets and yearling hens, also all W. H. Turkeys. Hens, \$10.00 per dozen, \$75.00 per 100. Turkey hens with broods of young, 1 hen and 10 poults, \$5.00. I intend to manufacture incubators and brooders and must sell my poultry and farm at prices that will move them.

CAL HUSSELMAN,
Highland Springs, Va.

Poplar Hill Poultry Farm



Dr. H. H. LEE,
Prop., R. F. D. 4,
Lexington, Va.
Breeder and shipper of Silver Laced Wyandottes. Fresh Eggs for hatching from high scoring birds, bred to lay. \$1 per 15. No more stock for sale at present.

TAYLOR'S

WHITE WYANDOTTES

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.

Berger's

White Wyandottes

are the snow white blocky kind that win Persistent layers the year round. (Trap nest used). Breeding stock at summer prices. City address, R. O. BERGER.

16 No. 20th St.
RICHMOND, VA.



BARRED PLYMOUTH ROCK

(Park's Strain) and

RHODE ISLAND RED COCKERELS,

April hatched, \$1 each, or six for \$5, up to September 1st.

FRED B. JONES, Gloucester, Va.

BARGAIN SALE Breeding Stock R. C. Brown Leghorns and Barred Plymouth Rocks. 10 other varieties. Write me our wants and save money. Get my big catalog, only 10c. JOHN E. HEATWOLE, Box L, Harrisonburg, Va.



SHEPHERD DOGS

Several beautiful Shepherd Pups, very fine stock on both sides. Will sell at the low price of \$5 each.

One six-months' old Spayed Shepherd female at \$6. A fine stock dog and beautiful color. Satisfaction guaranteed.

W. M. WATKINS, Saxe, Va.

Please mention the Southern Planter.

HINTS BY MAY MANTON.

Every variation of the princess model is being met with enthusiasm just now and many women who find the more severe style trying are sure to welcome such a pretty modified one as this. The skirt and the blouse portions are joined at the sides by means of a belt but the panels at the front and back give the long, unbroken characteristic lines. In this case foulard is trimmed with plain silk and with a little chemisette of embroidered batiste, but pongee, all the silks that are so much worn this summer line, cotton, the silk and cotton mixtures, cotton voile, and the like, are just as appropriate, so that the gown really can be utilized for a great many occasions and a great many fabrics. It is closed invisibly at the left of the back and it can be made either in walking length or the pretty round one that is graceful for indoor gowns.



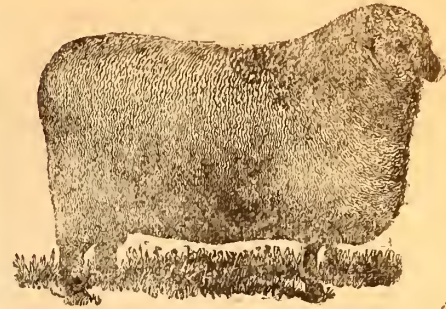
6057 Princesse Gown,
34 to 42 bust.

To be made in Walking or Round Length With or Without the Fitted Lining.

The gown is made with a fitted lining on which the panels and the blouse portions that are cut in one with the sleeves, are arranged. The chemisette is separate and is arranged under the blouse, so that if liked the

MY MOTTO:

"Best None Too Good."



REGISTERED SHROPSHIRE.

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 \$35.

5 2-year old rams, weighing 160 to 200 lbs., at \$18 to \$20.

2 2-year-old rams, good individuals, weight about 150 lbs., slightly under size, \$15 each.

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

3 ram lambs weight as above, \$12 to \$15.

A few good ewes, ranging in age, from 1 to 7 years, \$12 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 Aug. 15th, deduct 5 per cent. I have two good Berkshire Boars weighing about 125 and 150 lbs, \$15 each.

EDGEWOOD STOCK FARM

DORSETS.

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

J. D. ARBUCKLE & SONS,

Maxwelton, Greenbrier County,
West Virginia.

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.

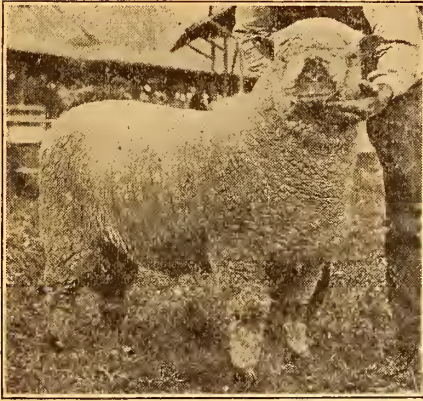
SAMUEL T. HENINGER,
Burkes Garden, Va.

DORSETS.

We offer a number of flock headers in yearling, two and three-year-old Rams; no ewes to offer at present excepting a few three-quarter bloods.

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

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, Yearling Ewes and Ewe Lambs for sale—and at reasonable prices—we ever offered, 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 pay not only great care to get the BEST in importing, but even more care in selecting our breeding flock. This is undoubtedly the reason our flock has such a great reputation.

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.

Pure Bred Suffolk Sheep



Largest Flock in the South.

Twenty Early Buck Lambs, sired by Imported Buck, for sale.

If you want the best sheep on earth for Early Lambs, and well marked, buy a Suffolk.

K. E. HARMAN.
Pulaski, Virginia.

ANGUS CATTLE. SOUTHDOWN SHEEP. ESSEX PIGS.

One choice Angus Cow, 5 years old; two choice Pure Bred Bulls, one and two years old. A number of Southdown Lambs, May, June and July delivery, and a few Essex Pigs for July and August delivery.

L. G. JONES, TOBACCOVILLE, N. C.

FOR MORGAN COLTS

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

Dr. JOHN D. MASSENGILL,
Blountville, Tenn.

lining can be omitted, making a thinner and lighter gown which can be utilized for the simpler washable materials as well as for those already mentioned. The skirt portion is made with two gores at each side, which are joined to the panels, and the front and back edges of these gores and the edges of the panels are arranged to form inverted plaits.

The quantity of material for the medium size is 10 3/4 yards 24 or 32, 7 yards 44 inches wide, 5-8 yard 18 inches wide for chemiseette, 1-2 yd. 27 inches wide for the yoke and cuffs.

The pattern 6057 is cut in sizes for a 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.

One piece frocks are exceedingly fashionably just now and are really very pretty for playtime and all occasions of a similar sort. This one is appropriate for linen for chambray, for percale, for gingham, and also for the thinner lawns of real hot weather, while it can be trimmed with bands of contrasting material or with one of the ready made bandings as liked. It hangs in long, graceful folds and the box plaits over the shoulders provide becoming fullness. In the illustration white French linen is banded with rose color, making an exceedingly attractive yet durable frock.



5999 Child's One-Piece Dress,
2 to 6 years.

The dress is made in one piece. It is laid in box plaits at the front and there is an opening cut at the center back where the closing is made invisibly. There are box plaits laid in

REDLANDS FARM

SHROPSHIRE SHEEP

Ten very fine Bucks ready for service.

RED POLL BULL

CALVES—VERY FINE.

AARON SEAY, Manager, Carter's
Bridge, Albemarle Co., Va.

RED POLL CALVES

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

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

VALLEY FRONT FARM.

Sassafras, Gloucester Co., Va.

I have a nice lot of registered Hereford Bulls and Heifers, for sale at farmers' prices. Also a number of grade Heifers and cows. My herd represents best strains and choice individuals.

Wm. C. Stubbs, Prop.

RARE OPPORTUNITY.

To secure pure-bred stock. Chester White, Poland-China and Berkshire Pigs; Jersey Bulls and Heifers; Lincoln, Hampshire and Shropshire Down Sheep; Scotch Collie Dogs. Variety of poultry. Send 2-cent stamp for circular.

EDWARD WALTER, West Chester, Pa.

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.

Devon Herd Established 1884. Hampshire Down Flock Established 1889.

DEVON CATTLE

BULLS AND HEIFERS,
HAMPSHIREDOWN SHEEP,
RAMS AND EWES.

ROBERT J. FARRER, Orange, Va.

THOROUGHbred

BERKSHIRE BOARS, JERSEY BULL CALVES, DORSET BUCK LAMBS.

Sire of Calves, FLYING FOX, 65456, son of Flying Fox, who sold for \$7,500 at the Cooper sale, 1902.

All stock in best condition and guaranteed as represented.

F. T. ENGLISH, Centreville, Md.

AT THE
LYNNWOOD
STOCK FARM

Can be seen among the Percheron mares, eleven that carry a per cent. of Brilliant blood, and five of these trace back on both sides to Brilliant (755) 1271, and a majority of these mares have won show-ring honors, as individuals, without any consideration being taken of their pedigrees.

Imported and native bred mares and fillies, as well as a number of stud colts and stallions for sale. If you contemplate buying any Percherons, do so before they go into winter quarters, as the breeder always asks more if he has had the excuse of preparing stables, food, etc., for winter. This is sound advice and especially for parties in search of a stallion for the increased per cent. of foals gotten by a stallion that has become acclimated and used to his new home will pay the cost of winter keeping.

Shorthorns and Berkshires also for sale.

JOHN F. LEWIS,
Lynnwood, N. & W. R. R., Va.

GROVE FARM

Brooklandville, Maryland.
P. O. Lutherville, R. F. D.; Telephone and telegraph, 42-K, Town.

The property of
James McK. and I. B. Merryman.

GUERNSEYS

The kind that win. Not beaten in 1907. Shown Maryland State Fair, Allentown, Pa., Mt. Holly, N. J., Trenton, N. J., Richmond, Va., and Hagerstown, 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.

ROCK SPRING FARM

Offers for Sale

REGISTERED GUERNSEYS

of the best strains; registered Duroc and Berkshire Swine; Breeding stock and eggs from B. Rocks, Pekin Ducks, White Holland Turkeys and Guineas.

H. T. HARRISON, Prop.
Leesburg, Va.

REDUCTION SALE

OF

BERKSHIRE PIGS

During the month of August, I will sell you a bargain in March and April pigs not only pedigree, but quality, and individuality combined.

E. F. SOMMERS, Somerset, Va.

If you are

Raising Hogs

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

the sleeve portions also but the only seams are those under the arms.

The quantity of material required for the medium size (4 years) is 2 5-8 yards, 24: 1 5-8 yards 32 or 44 inches wide with 3-8 yard contrasting material 36 inches wide for the trimming.

The pattern 5999 is cut in sizes for children of 2, 4 and 6 years of age and will be mailed to any address by the Fashion Department of this paper on receipt of ten cents.

AN EARLY "GOOD ROAD."

The desire to speculate a hundred or more years ago was apparently as great as it is to-day. An example of this is shown by the organization of a company in 1792, to build a turnpike from Philadelphia to Lancaster, Pa., a distance of 90 miles. The charter was secured, and in ten days 2,285 subscribers made application for stock. As this was more than the law allowed, the names were placed in a lottery wheel and 600 were drawn; with these subscriptions the work began. The road builders of that day knew little or nothing regarding the construction of highways, and the ridiculous mistakes made on this occasion taught them some valuable lessons. The land was condemned, the trees felled, and the roadbed prepared. The largest stones that could be found were dumped upon it for a foundation, and upon this colossal base earth and gravel were spread; then the work was declared complete; but when the washing rains came deep holes appeared on every hand, sharp stones protruded from the surface, and the horses received scratched and broken limbs as they sank between the boulders up to their knees. The gigantic error of the road-builder was then made plain. Indignation meetings were held, at which the turnpike company was condemned and the Legislature blamed for giving the charter. wmfycchm cm cftaytm wamwayfwm Had it not been for an Englishman who offered to rebuild the turnpike on the macadam plan, as he had seen roads built in the "old country," improved road construction would have received a severe blow. The Englishman's proposition was accepted by the company, and he was successful in completing the Lancaster and Philadelphia turnpike road, which was then declared to be "the best piece of highway in the United States—a masterpiece of its kind.

GUY ELLIOTT MITCHELL.

Habana, Cuba, Feb. 13, 1908.

I am a subscriber to many publications and can truly say that there are none that I enjoy more or receive more benefits from than the Southern Planter.

E. L. WINSLOW.

HYGEIA HERD

OF

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,
J. B. Loomis, Supt., Albemarle Co.,
Dr. W. F. Carter, Prop. Virginia.

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 Heifer Calves. Fine individuals, whose development has been pushed since the day they were dropped.

All these calves will be sold at farmers' prices. Write at once if you want one of them.

W. M. WATKINS & SON,
Saxe, Charlotte County, Va.

"Glenara Stock Farm"

Summer and Fall Offering

Dual purpose, Short Horn Bull Calves and Yearlings. Dorset Ram 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.

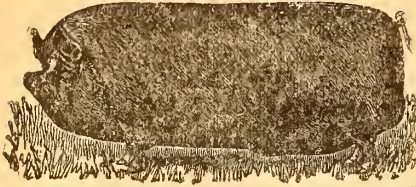
Address,

JOHN BUTLER SWANN,
Marshall, Va.

Please mention The Southern Planter.

Hunter of Biltmore 3d

(86,468) out of the *Huntress* and by the *Mammoth Loyal Lee of Francesca*, is a hog of great scale, with a head that is a marvel in shortness and beauty, with a body that is long, massive and low to the ground, with as good hams, legs, and feet as any hog in the United States, and the sire of as many good pigs as any living *Berkshire* boar.



Hunter is ably assisted by *VALARIA 88706*, a boar of great length, depth and finish, and by

EARHART'S MODEL PREMIER one of the best sons of *Baron Premier 3d.*, by the grand champion, *Premier Longfellow*.

The above mentioned boars represent the best breeding known to the student of *Berkshires* and mated with my famous *Silver Tips* and *Storm King Sows*, are producing pigs worthy of a place in the best herds in America. If you want a nice bred sow, service boar or young pigs you can get them here at reasonable prices.

Address,

D. E. EARHART, Nokesville, Va.

BERKSHIRE PIGS.

Entitled to Registration.

MAMMOTH BRONZE TURKEYS,
ENGLISH SETTER PUPS,
(Blue Belton)

My offerings are strictly first class.
MRS. G. M. WEST, Vinita, Va.

SUNNYSIDE BERKSHIRES.

Boars in service. "*Premier Duke*," son of *Premier Longfellow*; "*Peerless 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.

STERLING HERD REG. DUROC-JERSEYS. AND TAMWORTH SWINE

Duroc Boars ready for service.
R. W. WATSON, Petersburg, Va.

CHESTER WHITES.

"The best hog on earth." Shall be pleased to fill your orders for spring Pigs. My stock is A-No. 1. Satisfaction guaranteed.

S. M. Wisecarver, Rustburg, Va.

Tell the advertiser where you saw his advertisement.

GOOD HOUSEKEEPING.

Slaw.

A small head of cabbage cut fine. Beat one egg, a teaspoonful of sugar, and a pinch of salt together; stir in a teaspoonful of vinegar, a tablespoonful of butter, put in a pan on the fire, and let come to a boil; pour over the cabbage, mix well, put it in a salad dish; ornament with celery leaves, slices of ham, boiled eggs, or red beet pickle. If the vinegar is very sharp dilute with water.

A good plain Cake.

One egg, 1 cup of white sugar, 1 cup of sweet milk (water may be used if preferred), butter the size of an egg, 1 pint of flour into which has been well sifted 2 teaspoonsfuls baking powder. Work well together the butter, sugar and yolk of egg until foamy, then add the milk and flour, and lastly the well beaten white of the egg. May be baked in loaf or as a layer.

DEVELOPMENT OF FARMING APPLIANCES.

Every twelvemonth finds the American farmer a more independent citizen—each decade teaches him how to make his land more valuable, how to turn the forces and elements of Nature to his aid, and best of all, how to benefit by the numerous improvements which go to make farm work easier and productive of greater result.

The average farm of to-day possesses a score of devices which were unknown a few years ago; considered wildly extravagant then, their importance is now conceded by all.

For example, the baling press is now used on thousands of American farms—North, South, East and West; it has passed from an impossibility to a granted necessity.

The Baling Presses built by P. K. Dederick's Sons, 55 Tivoli St., Albany, New York, cover a broad range of purposes, and are noted for their superior construction, great endurance and consistent operation.

No pains are spared in selecting the choicest materials, while the Dederick factory is equipped with modern machinery and improved facilities. Dederick employees, skilled in their respective duties, follow the construction work throughout, maintaining the rigid care which has always made Dederick Presses so close a second to perfection.

The catalogue issued by this firm, which is mailed free to any address on application, illustrates the many styles and sizes of Dederick Presses, showing how they may be adapted to every branch of the baling industry. This catalogue will interest anyone who is considering the purchase of such a machine.



PURE BRED SHEEP SHROPSHIRE, SOUTHDOWN, DORSET, HAMPSHIRE.

I have Choice Ram and Ewe Lambs, Yearling, 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

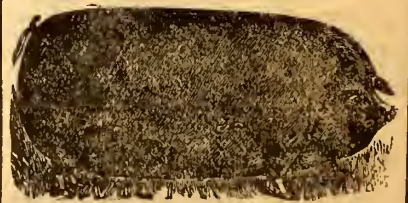
I have some choice 2, 3, and 4 months Pigs of the following breeds. Poland-Chinas, Berkshires, Yorkshires, Chester Whites, and Tamworths.

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.



WANT ADS.

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

POULTRY, ETC.

SALMON FAVEROLLES, THE LEADING utility fowl, 13 eggs \$4., Silver Spangled Hamburgs, Partridge Wyandottes, Silver-laced Wyandottes, Golden Seabright Bantams, White Rocks, Cornish, Indian Games, White Pekin ducks, White Guineas, Pearl Guineas, 13 eggs \$1. Buff Bronze turkeys, 11 eggs \$2. Guineas and Hamburgs for sale; Hamburgs \$2, male or female, trio \$5. Guineas, pair \$1.50 to \$3. Circular 15 varieties. A. E. Parsons, Berkshire, N. Y.

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.

BARGAIN SALE—SEVERAL HUN- dred yearling hens. White, Brown, and Buff Leghorns, Black Minorcas, White and Barred Rocks, R. I. Reds, Columbian and Buff Wyandottes, Clarence Shenk, Luray, Va.

FOR SALE—100 S. C. BUFF ORPING- ton cockerels from York, Hagerstown Washington prize winners. My birds win everywhere shown. Satisfaction guaranteed. A. F. Streett, Forest Hill, Maryland.

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.

WHITE WYANDOTTES—PRIZE WIN- ners and splendid egg producers. Summer cut price egg sale now on at 20 for \$1.00. Sunnyside, Jonesville, Va.

WANTED—BUYER FOR THIS Springs White Rock Chicks. Best way to buy stock. Can spare 200. C. M. Walker, Herndon, Va.

WANTED—TO BUY 100 BUFF LEG- horn pullets, 3 to 4 months old. J. N. Hamilton, Bel Alton Md.

PURE-BRED SILVER SPANGLED Hamburg cockerels for sale \$1 each. A. G. Hudson, Mitchells, Va.

BUFF ORPINGTON, B. P. ROCKS AND Silver Laced Wyandotte eggs. \$1 for 15. Mrs. W. M. Jones, Crofton, Va.

LIVE STOCK.

DON'T READ THIS—UNLESS YOU want a registered Duroc Jersey pig at half price. I am selling Duroc pigs 4 months old, have them registered and transferred to you for only \$10 each. Now is your chance to get a first class registered pig. L. G. Blankenship, Box 202, Roanoke, Va.

WANTED—ONE SPAN OF ALL PUR- pose mares, 6 to 8 years, weight 1150 to 1250 lbs. Must be well broke and with good action. Would like to have address of some one raising Angora goats. C. B. Pickett, Worsham, Va.

FOR SALE—NICE PAIR MATCHED roan mares, 61 inches, 4 and 5 years. Kind and gentle. 2 gentle ponies for children. Jno. M. Cunningham, Brandy Station, Va.

DUROC-JERSEYS, MOST PROLIFIC Hog bred, Virginia Dare 34800, farrowed 47 pigs in one year, 38 in six litters. I have now some as pretty as you ever saw from this noted breeder with pedigree to register. Clarence Shenk, Luray, Va.

FOR SALE—Registered Jerseys—FINE young bull, two heifers and two calves. Also registered Yorkshire Swine. Riverside Park, Morganton, N. C.

BEFORE BUYING YOUR BERK- shire Pigs write me for my prices and breeding. It will pay you. Dr. Charles G. Cannady, Roanoke, Va.

PURE-BRED YEARLING COTSWOLD rams of large size and 20-lb. fleeces also ewes to be bred to imported ram. E. C. Legge, Kent Island, Md.

FOR SALE—REGISTERED BERK- shire boar ready for service. Farmers' price. J. W. Adams, Addison, Va.

SHROPSHIRE BY DAVISON'S 1825. Shearling Rams, \$10 to \$12; Ram Lambs, \$8 to \$10 each. Edward Ray, Danville, Va.

TO SELL, AFTER JUNE 1, 1908, 30 good breeding Ewes and one Shropshire Buck. J. A. Spears, Nellwood, Va.

YORKSHIRE HOGS AND HAMPSHIRE sheep of the best breeding at farmers' prices. W. E. Stickley, Strasburg, Va.

PURE BRED SHROPSHIRE BUCK for sale or will exchange for ewes. E. L. Bailey, Ashland, Va.

FOR SALE—A FEW CHOICE PURE bred Berkshires, four months old. Dr. M. A. Crockett, Bedford City, Va.

CHOICE BERKSHIRE PIGS, MATED, not akin, \$5 each. C. S. Townley, Red Hill, Va.

REAL ESTATE.

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—100 ACRE FARM, WELL fenced, good land for tobacco growing. 40 acres cleared, balance in timber worth \$1,000. Also Saw Mill good as new with 10 H. P. boiler and engine 500 feet of pipes, tank and nump. Price \$1,800. Address Box 5, Wattsboro, Va.

SMALL AND LARGE TRUCK FARMS for sale, quick and productive soil; climate equitable. vegetables growing and shipping summer and winter. Write for particulars. S. A. Woodward & Co., Real Estate Agents, Norfolk, Va.

FOR SALE—A GOOD FARM OF 75 acres with nice orchard, good buildings, near church, school, and depot. Address Owner R. F. D. No. 1, Box 42, Drewry's Bluff, Va.

IF YOU WANT TO BUY OR SELL Property, any kind, anywhere write the Northwestern Business Agency, Minneapolis, Minn.

NEW YORK STATE FARMS FOR Sale. One acre to 650 acres. \$500 to \$16,000. Send for circulars. Hall's Farm Agency, Owego, N. Y.

CHEAP LAND WHERE INVALIDS get well without medicine and raise \$200 in fruit per acre. Eden Fruit Colony Company, Dewberry, Harnett County, N. C.

FOR SALE—FINEST KEPT COUNTRY Store in Va. Established 12 years. Good business. Stock \$4,000. Address "Extra," care Southern Planter.

SELL YOUR FARM DIRECT TO buyer. 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.

WANTED—POSITION AS SUPERIN- tendent on stock farm. Experienced in general farming. Have paid special attention to the tillage of grass lands and fodder crops. Practical knowledge of horse breeding and veterinary work. Care of mares, foals and stallions, the conditioning of show and sale stock. Highest references. A. W. care Southern Planter.

WANTED—WORKING FOREMAN, married, for my poultry and fruit farm. A fifteen acre farm adjoining mine, fronting on James River. Seven room house, barn, chicken houses, bearing fruit trees, etc., given rent free besides salary. State salary desired and experience. H. H. Bailey, 321-54th St., Newport News, Va.

POSITION WANTED ON STOCK FARM A young man 27 years of age, who was employed on stock farm for 6 years likes to get a position on a stock farm in Virginia as working foreman. Please address V. W., 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.

WANTED—MAN WITH FAMILY TO work on dairy farm. Must have one or two children old enough and that understand milking. Will pay good wages and furnish house with garden, fire wood, etc. Address "Albemarle," care Planter.

WANTED—BY A SOBER AND PRAC- tical man, position as manager or foreman on stock or dairy farm. References exchanged. 618 Highmarket St., Georgetown, S. C.

WANTED—A RELIABLE MAN WITH experience to work on farm and poultry plant. Small salary with interest in business. S. R. Church, James River, Va.

RELIABLE, INDUSTRIOUS WHITE man wanted as renter. Splendid team. Good chance for right man. Thos. Christian, Keswick, Va.

WANTED—MAN TO WORK FARM ON shares. One preferred who can furnish stock. Write giving particulars and I will send description of farm and orchards. H. D. Coleman, Ivy Depot, Va.

WANTED—MAN AND WIFE TO help run a small farm 14 miles from Washington. Mainly poultry, House, and wood for fuel furnished. Address proposition to J. W. Frole, Springfield, Maryland.

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.

MISCELLANEOUS.

WANTED—CORRESPONDENCE WITH man having capital with a view of establishing a market poultry and egg farm. High interest on money so invested. Have had many years successful and practical experience. Have No. 1 references from past and present employers. Those meaning business address P. L. W., care Southern Planter.

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.

SORREL.

I have a field that I wish to put in grass this fall and some parts of it are taken in sheep sorrel. Please tell me something that will kill it out and will it come up again next spring if the seed is plowed under after they get ripe and will it injure the grass next spring?

Louisa Co., Va.

A SUBSCRIBER.

The only way to kill out sorrel is to prevent it from seeding by cutting it before the seed falls and then breaking up the land and keeping it in a clean, cultivated crop until the weed is exterminated. You cannot get rid of it by plowing it down. The seeds will keep germinating as fast as they are worked up to the surface. Do not attempt to seed grass on a sorrel infested piece of land. It will kill out the grass stand. Sorrel is usually an indication of poverty of land. On rich land better plants will grow and smother out the sorrel. A dressing of lime helps to get rid of it by producing an alkaline condition of the soil which is conducive to the growth of better plants like grasses and clover.—Ed.

FAILURE TO BREED.

Please let me know what to do to make a cow breed. She had a calf in the spring of 1904—been giving milk since. Is there any thing I can do for her?

J. R. M. DILLARD.

Spottsylvania Co., Va.

You do not say whether the cow comes in heat regularly and then after

FOR SALE—ORCHARD GRASS SEED.

We are now prepared to offer our new crop of seed, all hand sieved, and ready for fall sowing. This seed is acclimated, guaranteed free of ox-eye and first-class in every respect. Samples and prices gladly furnished on request. Address, McGill & Son, The Plains, 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.

COLLIE PUPS FROM PEDIGREED

imported stock, \$5-\$10. Grown Collies \$10-\$15. May hatched Rhode Island Red chickens, 35c. eggs \$1-26; \$3-100. Shady Brook Farm, Route 2, Roanoke, Va.



ings covering ten acres. Woodward & Son, Richmond, Va.

Lumber, Laths, Shingles, Sash, Blinds, Doors, Frames, Mouldings, Asphalt Roofing, Yards and buildings.

HORSES. FOR SALE CHEAP

One year old sorrel gelding, well shaped, compactly built, very easy to keep. He is well broken and drives and rides well. A splendid farm and family horse. Price \$150.

One chestnut mare, 1200 lbs., blocky and easy to keep. She is a splendid farm and brood mare. Has a colt at foot and in foal again by Hackney Stallion. She is 9 years old this spring. Price, \$150.

One dark bay 1100-lb. mare, 9 years old, closely built. A splendid work and brood mare and rides well. She is about to drop a colt by Hackney Stallion. She will be bred again and sold for \$160.

W. M. WATKINS,

Saxe, Va.

MEADOW BROOK FARM



Large Improved Yorkshire Hogs and

Hampshire Down SHEEP

at reasonable Prices.

All stock registered or eligible. Round Hill, Va.

J. D. THOMAS,

FOR SALE CHEAP—NEW 3-HORSE McCormick Corn Harvester and binder. Cuts eight to ten acres per day. Address J. W. Spivey, Lewiston, N. C.

FOR SALE CHEAP—SAWMILL OUT-fit, 25 H. P. engine, planer, shingle-saw, cutoff and rip-saws, all in running order. Address Sawmill, care of Southern Planter.

SPECIAL OFFER ON FIRST ORDER for our new style automatic gate in any county. Address, with stamp, Manlove Gate Company, 272 Huron Street, Chicago, Ill.

"MERRY WIDOW HATS" ARE NOT half as pretty as my souvenir post cards. They are beauties and only 10 cents a dozen. LeRoys Bargains, Box 202, Roanoke, Va.

FOR SALE—ONE FINE SPLENDIDLY bred Registered Red Poll bull, 3 years old. Chas. H. Shaw, Massaponax, Va.

FOR SALE—RUFUS RED BELGIAN Hares, \$1 per pair. Jas. H. Whitten, Amherst, Va.

FOR SALE—DEERING CORN BINDER in good condition. Price reasonable. Edward Saxby, Quinton, Va.

THE GOLDENROD BERKSHIRES.

Daisy Girl, No. 90473, sired by Imp. Sir John Bull, II., No. 76416, farrowed ten pigs April 15, 1903. Mere choice sows to farrow. Order now. Some nice August Gilts, open or bred. Prices reasonable. Only first-class individuals sold.

Dr. J. B. TUTTLE, Craigsville, Va.

Tamworth Pigs

From Registered Stock of Fine BREEDING.

VOLNEY OSBURN,

Bluemont, Loudoun Co., Va.

WALNUT HILLS HERD

Reg. Angus Cattle

Yearlings and Calves for sale. J. P. THOMPSON, ORANGE, 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 40 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 season, 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 accepted quickly, for like Christmas, it comes but once a year.

DR. J. H. C. WINSTON,

Hampden-Sidney, Va.

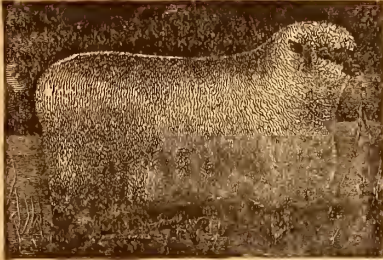
King and Queen Co., Va., Mar 27, '08.

I think I have been a subscriber to the Southern Planter since about 1870

and am sure it was never better than now.

R. N. POLLARD.

Poland Chinas and Shropshires



A choice lot of pigs sired by my fine boars, D's 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 interest 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. Durette, in 1906.



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

service fails to conceive or does not come in heat at all. If she fails to come in heat the usual cause of this is an overfat condition or want of exercise. Put her on a thin pasture and make her take plenty of exercise. There is a case on record of a valuable cow being sold as barren which was bought and driven on the road over 100 miles and then came in heat and bred a fine calf. It may be that the passage to the womb is closed and therefore she cannot accept service. If she comes in heat and is served and then falls to conceive, when she next comes in heat inject into the womb a solution of yeast, a cake of yeast dissolved in a pint of warm water. Inject this when she comes in heat and then a few hours later let her be served. This has been found effectual in many cases.—Ed.

GRASS FOR MEADOW.

What in your opinion is the best grass for a permanent meadow, soil light sandy loam, in good state of cultivation, raises good corn and wheat. How about tall meadow oat grass, combined with red top and alsike clover? Will the red top run out the oat grass?

Will not the alsike help to good crop for the first year? Sorry to trouble you, as you have answered this question many times but not for this precise soil and climate. There is a great difference between this soil and climate close to the water, and the uplands.

Matthews Co., Va.

BYRON SUTHERLAND.

The mixture you suggest will be all right but we would add to it some orchard grass. These three grasses will not run each other out as they all hold tenaciously to the soil when once established. The alsike clover will help not only the first year but for several years.—Ed.

**GRAZING PEAS AND SOY BEANS—
WINTER CROP FOR FORAGE
IN SPRING FOR HOGS.**

Kindly inform me which is the

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 100 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, Oom Paul 7545, Orion 5393, Crimson

Wonder 2nd, 31373, Gold Finch 7549, Top Notcher 8803, I. J.'s Chief 12446, Red Chief 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.

Jerseys

We are offering at attractive prices 10 HEIFERS UNBRED; 5 BRED HEIFERS; 4 BULLS, THREE OF WHICH ARE OUT OF TESTED DAMS. Write for careful description and pedigrees.

Poultry

Chicks for sale at reasonable prices from one month old to partridge size. Barred and White Rocks, Brown and White Leghorns.

Berkshires

We are now booking orders for spring pigs by LEE PREMIER and KING HUNTER (Imported).

All our prices are unusually low. Our stock is the best that can be produced. Absolutely healthy.

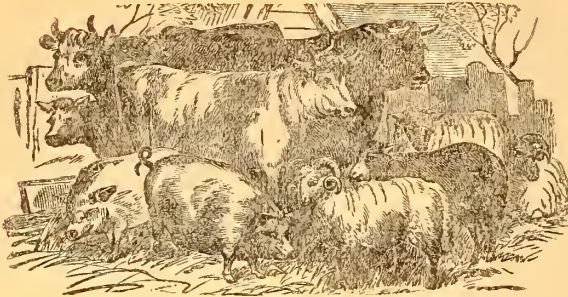
Just a postal card stating what you are interested in will bring you full particulars.

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

McCOMB & BLOCK

COMMISSION MERCHANTS

ESTABLISHED 1890.



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 sell 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. BOX. 483

proper time to turn our hogs on black peas—when the pods are all ripe or when the first pods are turning yellow? Some say one way and some the other. Also the best time to put hogs on soy beans. I have a low, flat, wet piece of land on which I wish to sow something for hogs to graze next spring. Can't sow anything on it before the first of November as at present have another crop on it. Tell me what would be best sown at that time and oblige.

A SUBSCRIBER.

Sussex Co., Va.

Turn the hogs on to the peas when the first pods are turning yellow and on to the soy beans when the first pods are beginning to harden. The only crop you can sow at the time named will be a mixture of hairy or winter vetch and wheat oats and rye and it is late for this crop but it may make a pasture. Sow 20 pounds of the vetch seed and a bushel of the mixed grain per acre.—Ed.

WEEVIL.

Will you kindly inform me how to keep weevil out of grain.

J. C. ANDERSON.

Pittsylvania Co., Va.

After the grain is threshed out put it in a tight bin or well closed granary and use carbon bisulphide 1 to 3 pounds to 100 bushels of grain upon it. The carbon bisulphide is a liquid very explosive and therefore no light must come near it when using. Pour the liquid into shallow saucers or vessels and place these on the top of the grain and close up the bin or granary tightly so as to keep in the fumes which will arise from the evaporation of the liquid. These fumes will sink down into the grain and kill every weevil or other living thing in it. Keep closed up for 24 or 36 hours and then ventilate freely and all odor from the liquid will pass off. This should be repeated two or three times during the winter to kill any weevils which may hatch out after the first application. When using the

Glenburn Berkshires.

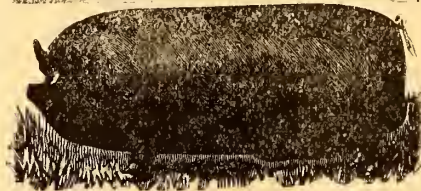
Lord Premier and Premier Longfellow are dead, but we have their best sons. Our LORD PREMIER III. is not only a son of Lord Premier, but is a litter mate to Lord Premier II. and a brother in blood to Lord Premier's Rival. Our PREDOMINANT and DOMINANT are probably the best sons of Premier Longfellow. IMP.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

FORFARSHIRE GOLDEN LAD JERSEYS.

Write for Catalogue.

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

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.

My experience with pigs reaches backward 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, FASSIFERN STOCK AND POULTRY FARM, Lexington, Va.

Buy some genuine Pekin Duck Eggs from me at \$1 for 12 and thereby get on the road to fortune.

IF YOU WANT THE BEST HOG

Buy from those who give their sole attention to the production of the "greatest Berkshire Type."
—WE DO.—

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

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

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

Berkshires and Jerseys

FOR SALE. REGISTERED SOW WITH EIGHT PIGS. NICE BOARS AND SOWS FIVE MONTHS OLD. REGISTERED JERSEY BULL, ALSO COWS FRESH AND DRY, TO FRESH DURING FALL AND WINTER

RIVER VIEW FARM, C. M. BASS, PROPRIETOR,
Norfolk and Western Railway. Rice Depot, Va.

When corresponding with our advertisers always mention Southern Planter.

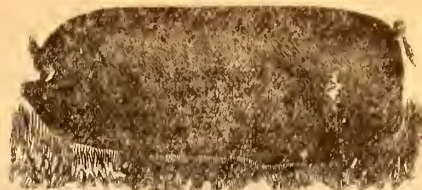


Ft. Lewis Stock Farm

THE BEST PLACE FOR BLOOD AND REGISTERED
BERKSHIRES

White Leghorn, all breeds of Plymouth Rock, Black
Minorca and Rhode Island Red Fowls. Eggs from these
pure-blooded birds for sale.

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



carbon bisulphide, don't breathe any more of it than you can help as it is deadly in its effects.—Ed.

MAINTENANCE OF FERTILITY.

Will you kindly tell me what will be the condition of my farm at the end of five years, farming it in the way that I do? I have two lots of 3 acres each, and one lot of two acres I use as a truck patch. I feed all the grain and hay made upon the two 3 acre plots using 50 loads of oak and pine leaves as bedding for the stock. The manure is kept under cover and put upon the truck patch—one application in the spring and one in the fall. I manage to keep a crop growing all the year round on it. Now as regards the two 3-acre plots. On lot No. 1 I planted it last year when I bought this place with corn with one bu. cow peas between the rows. After gathering the corn I plowed all the corn stalks, pea vines, etc., under with a two-horse plow as deep as I could run it then sowed winter vetch and oats, followed this spring by cow peas for hay. This fall to be put in rye followed by corn next spring, and so on with the same rotation.

On lot No. 2 I started with cow peas as a hay crop, put in corn and peas this spring and will follow the same rotation as with lot No. 1. At the planting of the corn I put 200 lbs. of acid phosphate and 100 lbs. kainit salt per acre.

Will the land improve or go back? I see no way in which I can change the rotation as I need the feed from the six acres. The land is a sandy loam, well drained, and this year I have the best looking crops in the neighborhood. Perfect stands and of an elegant color and everything perfectly cleaned up, hardly a weed upon the 8 acres.

WESLEY.

Horry Co., S. C.

You will need to use more mineral plant food upon the two 3-acre plots to maintain fertility than the 200 lbs. of acid phosphate and 100 lbs. of kainit. All the crops you grow on this land are great consumers of phosphoric acid and potash and this 300 lbs. will not supply their needs and keep up the fertility of the land. The peas and vetch will supply the nitrogen needed. You should help these two crops, peas and vetch, with 100 lbs of acid phosphate and 50 lbs. of muriate of potash per acre (use

JERSEY CATTLE.

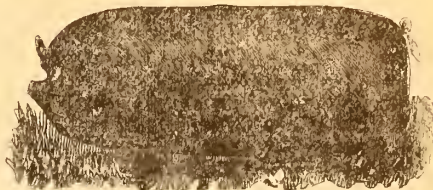
High-bred Cows Fresh to Calf.
Heifers Bred to Calves in Spring.
Bulls—All Ages—A Few Ready for Service.

BERKSHIRES.

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

BERKSHIRES FOR SALE.

FOUR EXTRA FINE BOARS READY FOR SERVICE. EXTRA LOT OF YOUNG BOARS AND SOWS, READY FOR SHIPMENT. IF NOT SOLD SOON THE YOUNGER BOARS WILL BE CASTRATED FOR PORK.



MOORE'S BROOK SANITARIUM COMPANY, CHARLOTTESVILLE, VA.

BERKSHIRES.

We offer BRED sows, GILTS and pigs of best Western blood at prices consistent with the hog market.

PHIL. H. GOLD, - - - Winchester, Va.

Sale of Registered Stock.

I will offer for sale, at my farm, commencing at 10 o'clock

August 20th, 1908

All of my Stock, consisting of about 80 head of finely-bred registered

JERSEYS, HOLSTEINS, BERKSHIRES.

At the head of the Jerseys, is FORFARSHIRE'S GRAND DUKE, one of the greatest sons of Forfarshire.

NANSENA DE KOL, a magnificent individual, is at the head of the Holsteins.

40 GRADE JERSEYS AND HOLSTEINS.

My Berkshires are finely bred and are headed by Mons. of V. P. I., and High-tide Premier.

Such an opportunity to purchase first-class stock, is seldom offered.

Mail bids will be given careful attention. If not able to attend the sale, write fully your wants.

TERMS CASH: Parties purchasing in quantities may have privilege of four months' credit by giving note satisfactory to bank.

RALEIGH COURT STOCK FARM,

C. G. CANNADY, Owner.

Box 118, Roanoke, Va.

Farm ½ mile from city limits on Garst Mill Road.

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.

the muriate of potash instead of kainit to supply the potash, it will give you better results and cost no more. (100 lbs. of kainit gives you only 12 lbs. of potash while 50 lbs. of muriate of potash gives you 25 lbs. of potash). The truck lot will probably keep up its fertility with the manure applied but this also would maintain its fertility better and give better results if you used 40 lbs. of acid phosphate with each ton of manure applied.—Ed.

SEEDING TO GRASS.

I have a field of fifteen or more acres that was in corn last year, and this summer am using it as a pasture, so a very heavy vegetation has come on it now, and I want to sow it down in grass this fall. Please advise me which is the best way to get it in grass. As some portions of the land are rather thin what kind of grass do you think is the best to sow. Wouldn't herdsgrass by itself do or to mix it with something else?

A SUBSCRIBER.

Louisa Co., Va.

If you will refer to page 523 of the June issue you will there find an article by Mr. T. O. Sandy describing his method of seeding to grass and from which he secures very heavy crops. In this month's issue you will find in the article on Work for the month our own advice on the subject. Read these two articles and follow them and you will succeed if your land is only made rich enough. Grass never succeeds on poor land.—Ed.

HORSES NOT SWEATING WHEN AT WORK.

We have had a number of enquiries as to the course to be followed when horses or mules will not sweat when at work in the hot weather. As a consequence of not sweating the animals soon become incapable of working and we have had several reports of

OTHER HERDS COME AND GO BUT THE OLD ESTABLISHED

SUNNY HOME HERD

OF

ABERDEEN ANGUS CATTLE

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.

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 puppies—all of above ready for shipment. Come and see them.

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

FOR SALE!

SIX BERKSHIRE GILTS.

FINE INDIVIDUALS.

TWO BOARS.

**Forest Home Farm, PURCELLVILLE,
VIRGINIA.**

MORVEN PARK.

The Property of WESTMORELAND DAVIS, Esq.

Registered Dorset Horn Sheep.

Dorset Horns are one of the oldest and most valuable English breeds. Unrivalled for fecundity, early maturing and the production of early lambs. They are adapted to all climates and possess hardiness of constitution so essential to the improvement of the grade flocks of this country. In their pure state they are the producers of the early lamb—the most profitable phase of sheep raising. For crossing purposes they have no equal, and even on grade ewes the result is marked in the strong, vigorous and easily fattened lamb and the earlier season the lambs will wean. Dorsets are the best feeders, heaviest milkers, carry a heavy fleece of compact wool and produce mutton of the highest quality.

The MORVEN PARK FLOCK of Ewes was founded on selected Ewes from the choicest of the English flocks. They are remarkable for their even and family likeness, their great size and substance, their hardiness and robust constitutions. They are very prolific—each season dropping a high percentage of twins and triplets are not uncommon. Their milking qualities are unsurpassed.

The Service Rams are chiefly imported English Royal Winners, and some have been shown in America—in each case taking all the firsts.

At the Virginia State Fair, 1907, the flock won two championships, two reserve championships, eight firsts and seven seconds.

We are now booking orders for fall born Ram Lambs for June delivery. They are a grand lot—full of quality and true type with grand substance and bone. They are not forced, but kept growing to be fit for service this season and will weigh from 110 to 130 pounds, averaging 120 pounds at six months.

ALSO BREEDERS OF

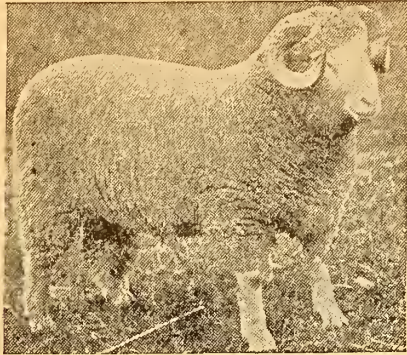
Improved Large White Yorkshire Swine

AND

Registered Guernsey Cattle.

ADDRESS

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



BREEDING EWES

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.

death. We referred this matter to Dr. Spencer of the Experiment Station. He says the trouble is generally due to the animals being out of condition and probably suffering from indigestion. He advises that an animal in this condition should be worked very easily and be treated to restore a better condition of the digestive organs. Bran and oats should be fed. A purgative be given of raw linseed oil followed by tonics such as equal parts of sulphate of iron, gentian and nux vomica, also an ounce of Fowler's solution of arsenic once a day for a couple of weeks.—Ed.

POLL EVIL.

Please give the cure for poll evil in the Southern Planter.

C. S. MILLER,

Williamson Co. Tenn.

Poll evil is simply a fistula on the top of the head and should be treated like other fistula. If taken in time when first forming it may often be aborted and stopped by general and local treatment. A physic should be given and the horse receive 1 oz. of saltpeter three times a day in his water or food. If the fever runs high 20 drop doses of tincture of aconite every two hours may be administered. Cooling lotions, muriate of ammonia or saltpeter and water, sedative washes as tincture of opium and aconite chloroform liniment or camphorated oil are also to be frequently applied. Where however the fistula is well established and the formation of pus or matter has begun this must be hurried on as much as possible by hot fomentations and poultices of bran and flaxseed meal. The wall of the abscess should then be opened at the lowest point so that the pus can escape as fast as it is formed and thus avoid the formation of pockets of sinuses. When the pus cannot escape it will form these pockets between the muscles and after this has occurred then usually the only recourse is the use of caustics to cause sloughing and the use of the knife to open these pockets and let out the pus. As a caustic solution granular chloride of zinc is

We Have For Sale

One extra good yearling Southdown buck and a limited number of Southdown Ram Lambs. No more Shropshires or Berkshires for sale this season.

H. A. S. HAMILTON & SONS.

Shadwell, Va.

"Hunter's Hall."

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.

DUROC JERSEYS-POLLED DURHAMS- SHORTHORNS-SHROPSHIRES.

DUROCS are the most prolific hogs on earth. The smallest litter farrowed last spring was ten, the largest litter fifteen, the average 11 8-10 pigs to the litter for our entire herd. The Duroc fattens at any age, and will make as many pounds of pork for a given amount of feed as any hog on earth. We have the largest herd in the East—Ohio Chief, Orion, Beat Him If You Can, Top-Notcher, Comodore and Colonel blood. Pigs from eight to twenty-four weeks old, service boars, gilts, and sows in pig, for sale,—two hundred in all.

Polled Durham and Shorthorn cows and heifers and Scotch and Scotch topped bulls for sale at low prices.

A few extra good registered Shropshires for sale.

LESLIE D. KLINE, Vacluse, Va.

Ingleside Herefords



OWNED BY **S. W. ANDERSON**, BLAKER MILLS,
GREENBRIER COUNTY, W. VA.

A choice lot of **Bulls, Cows and Heifers** for sale; also, a few **Polled Hereford Bulls**, recorded in the National Polled Hereford Record.

Write for Catalogue and Prices.

FARM NEAR ALDERSON, W. VA.

Telephone and Telegraph, Alderson.

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Incorporated 1907.

"STANDARD OF EXCELLENCE."

Capital Stock \$100,000.

THE VIRGINIA STOCK FARM CO.**Incorporated.****Bellevue, Bedford County, Virginia.**

J. ELLIOTT HALL, General Manager.



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By

The Virginia Stock Farm Co., Inc.

SHORT HORN COW.

Standard Type of the Farmer's Cow.

Drawing by John W. Hills.

THE VIRGINIA STOCK FARM COMPANY, Inc.,

Is an organization founded for the purpose of improving the live stock of the State of Virginia and assisting the farmers in developing her agricultural industries.

ARE YOU A FARMER? A STOCKMAN?

Or are you interested in any way in seeing Virginia become one of the greatest agricultural States in the Union.

If so, it is to your interest to learn all the particulars concerning this organization and to support it in any possible manner. Its objects and purposes are clearly set forth in the

"INAUGURAL ANNOUNCEMENT"

A copy of which will be mailed you upon request. The issue is limited, better write to-day. A Postal Card will bring it. Kindly mention the Southern Planter when writing. Address the Company as above or the General Manager.

DO IT NOW!

J. ELLIOTT HALL, BELLEVUE, VIRGINIA.

probably the best, 1 oz. to a pint of water, and this solution must be injected into every diseased part three times for one week after which a weaker solution should be used occasionally until all formation of pus ceases.—Ed.

IMPROVING LAND FOR WHEAT.

Will you please tell me what you think my land needs. I have 25 acres in one field that is clay land but is good land which should bring 50 to 60 bushels of corn per acre without fertilizer of any kind as I have raised in the past 45 bushels per acre and the land is much richer now than then, but I am unable to get more than 12 or 15 bushels of wheat per acre with the use of 400 lbs. of fertilizer per very large corn, it is in corn this acre. I am under the impression that this land needs lime. What do you think of it? And do you think it will pay me to use lime that will cost \$4.35 per ton delivered here. I also have a piece of bottom land that grows year. Do you think it would pay to lime this for wheat this fall. This ground is full of humus.

If I used lime how should it be applied, i. e.: how should I spread it and what would it cost to lime land counting labor, and cost of lime \$4.35 per ton.

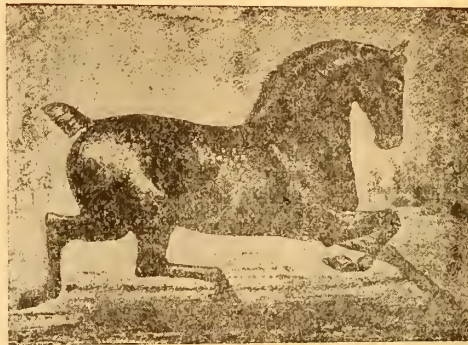
HENRY B. PETERS.

Bath Co., Va.

We are of the opinion that your land needs lime to improve its physical and mechanical condition and to release the unavailable potash naturally in the soil. In our own experience in growing wheat we have always found lime to be of great advantage. It will pay you to use it at the price you name and the whole cost of applying one ton to the acre, which is the quantity we advise, would not be more than \$5.00. The lime should be set on the land in lumps as it comes from the kiln of about half a bushel each be then slaked with a bucket of water or a little less to each heap and let lay for an hour or two until it has all fallen to powder and then be spread with a shovel. Both in Maryland and Pennsylvania the plan has been adopted with great advantage and several subscribers have written that they can well afford to apply lime at a cost of \$5.00 per ton. We have induced hundreds of farmers in Virginia to use lime during the past few years and we have never yet met with any one who has used it who has not found help from it. It may be also that your land needs more phosphoric acid to help the wheat crop and possibly some nitrogen as well. Bone meal usually tells well on the wheat crop as it supplies both phosphoric acid and nitrogen. In this issue you will find an article by Mr. Hicks in which he deals with the question of a proper fertilizer for the wheat crop. Read this.—Ed.

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 profits. There is no place in America that you can make a better selection than at my place, for I handle five different breeds. My draft stallions weigh from 1700 to 2200 lbs; my high-stepping Hackneys and Coaches weigh from 1200 to 1400 lbs. If you are in need of a good stallion in your community, write and tell me your wants, and I will try and place one there. I will give you plenty of time to pay for the horse. Every horse is backed up with an iron clad guarantee, and all of them are good enough to win in any company. Correspondence solicited, and visitors welcome. If a good stallion is wanted in your community please write me.

W. B. BULLOCK, Proprietor, Moundsville, W. Va.

THE HOLLINS HERD

—OF—

HIGH-CLASS HOLSTEIN-FRIESIANS.

A working herd—working every day in the year. During April we milked

Five mature cows.

Eight heifers with second calf.

Six heifers with first calf.

(Six out of the nineteen are due to freshen before the 15th of July.)

Total number milked..... 19

*Total number of gallons per day..... 80

Per cent. of butter fat..... 4.2

BULL CALVES FROM 2 TO 8 MONTHS OLD FOR SALE.

JOS. A. TURNER, General Manager
Hollins Institute, Hollins, Va.

*During May the same herd milked 81 gallons per day.

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

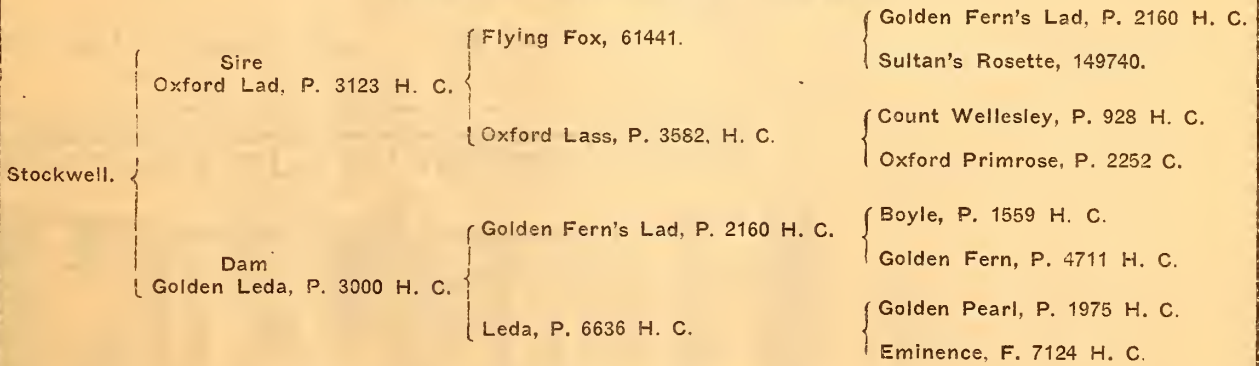
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Wyldeewood Farm Jerseys.

Herd numbers 300, including some of the finest the island has produced, headed by the great sire Stockwell, whose abbreviated pedigree is given below.



Imported Stockwell, 75264.



For Particulars of Offerings, General Information, etc., Address

Wyldeewood Farms, Fredericksburg, Va.

CANADA PEAS AND OATS—SICK HOGS.

Will you please give reason for Canada pas turning yellow and drying up after reaching a height of 6 up to 12 inches, which were sown last week in February, one bushel peas and one and one half bushel oats per acre.

2. Would like to know why hogs should become weak, stagger and fall when starting to walk after grazing (22 head since May 15th on 3 acres) rape and getting one feed of corn per day and looking thrifty.

L. A. ARMSTRONG.
Pasquotauk Co., N. C.

1. Canada peas cannot stand hot weather. As soon as the weather becomes warm mildew starts in them and they wither away. The crop should in the South always be cut at the latest in May by which time if sown in February it usually on good land makes a good heavy hay crop.

2. It is difficult for us to form any certain conclusion as to the trouble from which your hogs suffer. Usually on rape hogs keep in good health and improve rapidly, especially if fed a small ration of corn. Rape is a maintenance ration even for a brood sow but to get both growth and weight some corn should be fed with all grazing crops unless they have got to that period of growth when if seed bearing crops like cowpeas and soy beans they are perfecting their seed when the grain supplied by the plants will be sufficient. It is probable that worms are at the bottom of your trouble. We would give them some turpentine in slop once or twice a week, say a tablespoonful for each hog. It may be that have eaten some poisonous weeds which have grown up in the rape. The tonic which we advised in our May issue page 496, is a most excellent preventative of disease in hogs and should be kept on hand by all hog raisers and be given as there directed. We have had many testimonials as to its efficiency in keeping the hogs healthy and doing well.—Ed.

A STUMBLING HORSE.

I have a two year old Wilkes colt and he stumbles some. Is there any way to break him of stumbling? If so, how? He is also a little tender footed. Would you shoe him.

O. M. FARRAR,
Putnam Co., W. Va.

It is more than likely that the stumbling is caused by some weakness of some of the muscles of the foot or leg incidental to a young growing horse and that as he acquires strength the trouble will cease. If he has tender feet it might be well to have him shod with light shoes especially if he is used at all on the road but we do not advise shoeing horses running in the pasture as the shoe interferes with the natural growth of the foot

QUALITY
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.

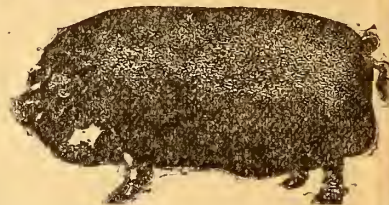
POLAND-CHINAS AND BERKSHIRES.

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.



EXCELLENT

SHORTHORN HEIFERS AND BULLS.

By the Scotch topped Bull, Royal Lad (advertised by the old reliable breeders, P. S. Lewis & Son, as the best Bull ever bred on their farm) by the International winner, Frantic Lad, son of The Lad For Me, champion of America in 1900. Also a few fresh Shorthorn Cows.

Pure Yearling SOUTHDOWN RAMS by Senator, a prize winner in Canada as a lamb and a yearling. He was bred by Hon. George Drummond, the foremost Southdown breeder in America.

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

RED POLLED DURHAM CALVES.

I have for sale about ten Polled Durham calves, all nice grade stock, some heifers, some bulls, will crate and deliver them at express office at from \$15 to \$25 each, according to quality. Will be ready to ship in August.

I also have for sale one two year old Southdown ram at a bargain. One male and one female BLOODHOUND puppy, thoroughbred and ready for training, at a bargain.

THOS. TOMLINSON, Owner, "Tate Spring" Box 23, Tate Springs, Tenn.
Reference, Dun or Bradstreets.

THE INDUSTRIOUS HEN
KNOXVILLE, TENN.

Circulation 10,000. 10c. a line.

Leading FARM and POULTRY Journal.
LAYS ALL OVER THE SOUTH.

ANIMAL DIP-DISINFECTANT-LICE KILLER-WORM POWDER

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IS FOR SALE AT ALL DEALERS EVERYWHERE

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SEND FOR FREE 64 PAGE VETERINARY BOOK

IF ZENOLEUM IS NOT SATISFACTORY, EITHER WE OR YOUR DEALER WILL REFUND YOUR MONEY
THE ZENNER DISINFECTANT CO., MAKERS, 93 LAFAYETTE AVENUE, DETROIT, MICHIGAN

When corresponding with our advertisers always mention Southern Planter

and to do no harm requires almost constant change. We do not know of anything that can be done to prevent the stumbling.—Ed.

SUMAC, SWEET POTATOES—GRAIN FEED ON PASTURE.

1. Will you tell me what portion of the sumac bush is gathered for commercial use, how and when to gather and prepare same for market.

2. In storing sweet potatoes for winter how can you tell when they have gone through the sweat as necessary before putting away.

3. What grain feed should be given to dairy cows running on good broom straw and Japan clover pasture?

B

Henry Co., Va.

1. The leaves of the sumac bush are the portion desired by the tanners. They should be gathered when fully matured but before they begin to die and be dried in the sun thoroughly.

2. When sweet potatoes or Irish potatoes (and the same is true of apples) are put up in piles or kilns after being dug they naturally develop heat and pass through a sweat which is very perceptible on the tubers and this will continue for some time, often for a week or two. This heat should be allowed to pass off by ventilating the piles or kilns at the top. Before the weather becomes cold these ventilating holes should be closed to keep out the frost. When sweet potatoes are stored in a cellar or potatoe house the temperature is usually raised by stove heat for a few days after storing to hasten their sweating and to dry off the moisture as it forms and then when the tubers are thoroughly dried out the temperature is lowered down to 50 or thereabouts and they will keep well.

3. A daily ration of 6 or 8 lbs. of corn, bran and cotton seed meal in equal parts can generally be fed to dairy cows on pasture with advantage, when the pasture is not a good one or is getting old and woody even more than this can often be profitably fed.—Ed.

SAVING COW PEA HAY.

I want to thank you for your kind letter of June 10th, and then to ask you to give me more information in regard to saving and preparing a large crop of pea hay for the market. I will have about 400 acres to save and will need the right kind of implements to do it.

Can tedders be used to advantage where the vines are rank and long, and if so, which are the best makes?

Do you advise the use of haycock covers costing about 75c each for curing pea hay?

What steam hay press would you prefer for baling pea hay after it had passed through the Koger pea vine

Cheap Farms Near Herndon.

142 Acres 3 miles from station, nice location, near pike and on 2 good roads, stream through place, 8-room house in good condition, with lawn and fine shade, good barn and outbuildings, 8 miles from electric line. This farm has been somewhat neglected, but with proper treatment would make one of the best farms in the neighborhood. Price \$5,500.

57 acres, 3 miles from station, on macadamized road, near village, where there is church, school, store, etc., good house of seven rooms, barn and outbuildings, fine fruit, shade, well fenced. This is a good truck and poultry farm, in a desirable neighborhood. Price \$4,000.

99 acres, 2 miles from railroad, in a high state of cultivation, comfortable house of 5 rooms, fine stream and well, barn that cost \$1,000, good outbuildings. Price \$5,500.

233 acres 1½ miles from railroad, 165 acres cleared, 2 wells, cistern and stream, 12-room house in good condition, nice shade, barn and necessary outbuildings. Price \$5,575 if sold soon. A very cheap place.

75 acres, 3 miles from railroad, 3 acres in timber, 30 acres in clover and timothy, 13 in oats, 17 in corn, a large stream, springs in all the fields, cage woven wire fencing, with cedar and locust posts. First-class house of 15 rooms, with large bath-room, fruit and shade trees, orchard of 4 acres, good barn, 28x50 cowbarn adjoining, all necessary outbuildings, running water at barn, water piped to house from spring 85 feet away. A fine place, must be seen to be appreciated. Make us an offer on this place.

93 Acres, 1½ miles from station, 18 acres in oak timber, rest mostly in grass, heavy clay soil, in good state of cultivation, good 9-room house, well at door, pretty barn, plenty of shade, first-class barn with basement for 25 head of cattle, all kinds of fruit, outbuildings. This is an ideal home and an excellent investment. Price \$8,000, \$2,000 down, balance to suit.

100-acre Dairy Farm on railroad, near station and sidetrack; 8-room house, large cellar. Barn 30x80 feet, with basement stable for 33 cattle and 8 horses. Dairy and other necessary outbuildings, all in good condition. Fine water at house and barn. Productive land, well fenced, \$6,500.

227 acres, 5 miles from rail over macadamized road; mostly white oak, hickory, and some valuable red cedar. Land adjoins farm that is held at \$50 per acre. Price \$5,000 for whole, \$2,000 for timber, without land. Terms to suit. Write or telephone us at once.

P. B. BUELL & SON,

Herndon, Va.

Stock farms in Northern Virginia a Specialty.

JOHN F. JERMAN, Headquarters for Virginia Property, Fairfax Va.

Washington Office, No. 1220 H Street, N. W., and Vienna, Va.

If you want to buy a grain, dairy, fruit, truck, poultry or blue grass farm, city or village property, or any kind of business proposition, such as hotels, stores, livery stables, schools, or any kind of shop, it will pay you to send for my 50-page catalogue. It is full of bargains, near steam and electric railroads and near Washington, D. C., where we have the best of markets. I am always ready to show my property. I try to please.

MY MOTTO: "HONESTY AND FAIR DEALINGS."

Farms in Northern Virginia

DAIRY, GRAIN, STOCK, POULTRY, FRUIT.

Near Washington and Baltimore and in easy reach of Philadelphia and New York.

Unlimited markets and unsurpassed shipping facilities.

Reasonable in price. Near good live towns, schools and churches. Write us.

CLAUDE G. STEPHENSON

(Successor to Stephenson & Rainey, Herndon, Va.)

\$35⁰⁰ FANNING MILL FREE

A Fanning Mill Free. If there are no dealers near you selling the famous Racine Line of Farm and Warehouse Fanning Mills, that clean, grade, separate and bag all kinds of grain and seeds as well as cow peas, velvet beans, rice, peanuts, chufas, etc., then write to-day for particulars about our free mill to one person in each neighborhood who will furnish us his neighbors' names to whom we can write to call and see the mill and who will show what the mill do when they call to see it.



JOHNSON & FIELD MFG. CO., Box 102, Racine, Wis.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

thresher, and where only rough plantation labor can be had?

I have written the Koger Pea and Bean Thresher Co., Morristown, Tenn., twice but can't hear from them.

W. S. LOVELL.

Jefferson Co., Ala.

I have always used a tedder in the making of cow pea hay, and consider it indispensable for the rapid wilting of the hay. I keep it going right after the mowers. There will be no difficulty in using the tedder when the vines are in condition to mow for seed. When very green they might be rather heavy. You can make caps of twilled cotton a great deal cheaper than 75 cents. The compressed paper caps are worse than useless. They shed the rain, of course, but they shut down the moisture arising from the green peas and cause heating in the cock that does more harm than the rain. Usually when the seed crop should be cut you will have little use for the caps, and really rain damages the peas but little. Of course you are going to lose most of the leaves cut at a stage proper for seed, but the feed will still be valuable though somewhat less so than if cut in the proper hay-making stage. I have always secured good pea vine hay without the use of caps of any sort. I once tried the compressed paper caps and threw them away after one use. I never saw but one make of tedder and do not know that there are others for all are on the same plan, and all can be bought at the dealers in implements in the cities. I have had no experience in baling hay, having never grown any for sale in my life, but always feeding all I made and sometimes more. It is rather strange that you do not hear from the Koger Co., for they should be anxious to get orders. Perhaps they are delayed in getting out more printed matter. Perhaps the editor will help me in telling you about hay presses, for I must confess that I have never had any use for one.

W. F. MASSEY

You will find hay baling presses advertised in this issue. All the advertisers are reliable people and we have subscribers using all the different makes advertised and they all give satisfaction.—Ed.

CABBAGES DYING.

Will you please tell me in your next issue how to prevent the dying of cabbage and what is the cause of it. Is it a disease in the seed or in the land? It is almost impossible to raise them for family use in our section. I have tried seed from different seed men and in different soils and all died to a large extent.

A SUBSCRIBER.

Calvert Co., Md.

There are two fungoid diseases which cause cabbages to rot and die in the field. The one is clubfoot and

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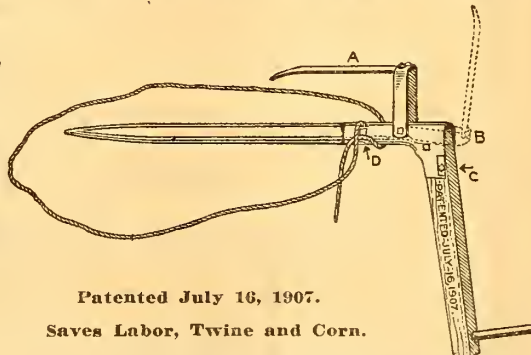


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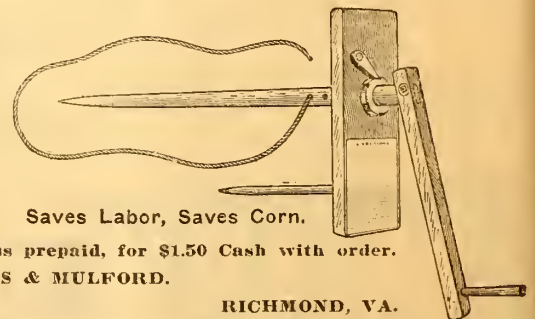
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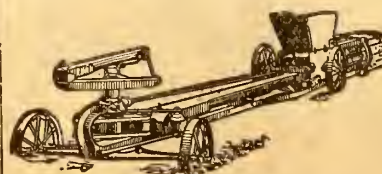
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the other the cabbage rot. They are both incurable by any application to the plants when once they have started but can almost wholly be prevented by proper rotation of crops, never growing two crops of cabbages or other cruciferous crops twice together on the same land. The spores of these two diseases infect the land and perpetuate the disease from year to year. Wherever cabbages are affected by either of these two diseases every diseased plant should be burned up. If they are thrown amongst the manure in the yard the infection will be carried to all land to which the manure may be applied. After the plants have been burned up then apply a dressing of 25 to 50 bushels of lime per acre and this will kill the spores in the land. Care should be taken when setting out the plants never to set a plant which has a club root or the disease will be introduced into the land. There are often plants in every lot raised which show infection or club roots and these should be burnt.—Ed.

SAVING VETCH HAY.

July Planter just to hand. On p. 606 Mr. Norfleet says a neighbor harvests vetch with a horse rake. At what stage of maturity? How does Mr. N. harvest it? I am surprised at his saying it is easy to cure. It is the slowest curing hay I have ever tried. Perhaps I cut too early. For sowing seed a successful way is to sow in cotton and let cotton stalks hold it up. Cut stalks and all, throwing each swath out of the way of mower before going on next round. Haven't tried to make hay this way. I am anxious to learn an easy way to cure vetch as it makes a heavy crop.

J. F. HUNTER,

Warren Co., N. C.

In answer to Mr. Hunter's question will say that my neighbor, Mr. Phillips and myself, both agree in waiting until our vetch would seem to have formed but not opened its last bunch of blossoms. He then drives his horse rake over the field gathering the vines, which are macerated from the shade and moisture at the ground so that they readily break at that point and then dumps them in an irregular windrow. I always cut my crop with a "potato digger" which is a long toothed rake. Walking into the hay and getting a good hold with this rake I step back and it is astonishing how fast the cut can be made in this way. The hay is allowed to lie until late in the afternoon when it is put in small cocks. These are opened on the third day, left until afternoon and re-cocked, left one day and then opened and housed that afternoon. Of course this is a course I pursue when the weather is good. Showers may delay me but as a rule a cut made on Monday is in the barn on Friday af-



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ternoon. The hay to be in my ideal condition should show the green color in it and should be limp but should not contain a drop of foreign moisture. In a week the hay will take a heat and throw off an astonishing amount of ammonia gas, but you should let it alone and this soon passes off leaving an extra good hay. In twelve years time the only failures I have ever made have been due to allowing the hay to lie so long in the sun that it came out dry, tasteless, odorless, straw fit only for bedding. I don't see why cutting early should make the cure difficult, but I do think the hay would shrink in a most heart rending way for the immature vetch vine can certainly go away to nothing when exposed to the sun.

Several of my friends cure as I do and report good results, though at first the heat the hay developed rather frightened them.

L. E. NORFLEET.

WINTER COVER CROPS.

I notice most all writers say that land should be covered with some green crop during the winter. What would you advise me to sow? Will cut corn about Oct. 1st and would not have to use land for corn again until next June. Would red clover improve land much by that time. I find in this climate it would be too late for crimson clover.

SUBSCRIBER.

Bristol, Tenn.

The only crop you can sow to provide a winter crop so late as October will be hairy or winter vetch with oats, wheat and rye. Sow 20 lbs. of the vetch seed with a bushel of the mixed grain. We would not advise the sowing of red clover at that time and even if it made a stand it would not by the time you wanted to plow it down for the next crop have made sufficient growth to materially help the land. The vetch will give much more help to the land and the following crop.—Ed.

CORN FAILING—SEEDING CLOVER

I have a ten acre piece of land in corn which is not doing very well. I plowed down a light crop of crimson clover 6in. deep, which on previous years had been plowed about 4 in., then I sowed 1,500 lbs. of Legore, Md. lime to the acre, harrowed it in well and sowed the corn on May 15 and 16. To-day some of the corn looks fairly well, is 5 and 6 feet high and is tasseling out. Other parts of it, strips here and there from two to four rods wide and five to six rods long, when the stalks were about 6 in. high the leaves turned a rusty, reddish color, since when it has grown but little. Some say the corn is lime burned and others that the land is corn sick. With exception of one year when it had a crop of wheat, this

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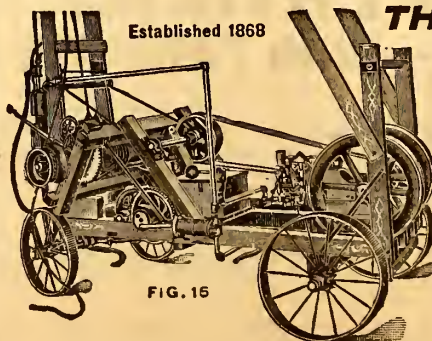
sufficient amount and you will undoubtedly increase not only the average yields, but your profits as well.

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CATALOG MAILED ON REQUEST.

lot had successive crops of corn for five years. What would you consider the trouble to be? After harvesting the corn I intend to sow it to Mammoth Red Clover. How would you condition the land? The soil is sandy with a light clay subsoil. Would winter oats be successful as a shelter crop and to cut for hay in the spring? If so, what kind would you advise sowing and when should they be sowed?
A. NUNN.

Kent Co., Delaware.

The trouble with your corn is that it lacks a sufficiency of available plant food. Constantly growing corn and wheat has exhausted the mineral plant food—phosphoric acid and potash and there does not seem to have been anything given to supply nitrogen except the light crimson clover crop. The lime did not add any fertilizing matter but merely made available more of the potash and improved the mechanical and physical condition. We doubt whether you can secure a stand of mammoth red clover on such land and certainly not if seeded after you have harvested the corn. There cannot be plant food enough in the land to grow such a crop. If you would apply 400 lbs. of bone meal to the acre and sow in the corn, you would possibly succeed. Our advice would be to sow crimson clover and wheat, oats and rye in the corn crop now, say 12 lbs. of crimson clover and one bushel of the mixed grain. Crimson clover will grow on poorer land than any other clover except Japan clover. In this way you might get a winter cover for the land and a fallow to plow down in the spring. Follow this crop with a cowpea crop to which apply 300 lbs. of acid phosphate to the acre and cut this crop into the land with the disc harrow in the month of August next year and then you can expect to grow mammoth clover and grass, which we would sow in that month or September without any grain crop. September is as late as grass or clover should be seeded. Winter oats ought not to be sown later than September.—Ed.

SEEDING TO GRASS.

Please give the best plan for getting two or three house lots into grass for pasture as quickly as possible.

King William Co., Va.

In the May issue of The Planter you will find an article from Mr. Sandy describing his method of laying down grass land. In this issue in the article, "Work for the Month," you will find our advice on the subject. You cannot succeed in growing grass unless your land is in a fine mechanical and physical condition, rich and free from weeds. To secure the first requires deep plowing and perfect breaking and the application of a ton of lime to the acre to be



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If there were no way of knowing good paint materials from bad, except by waiting to see how they may wear, painting would necessarily be the lottery which many people make it.

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worked in in after it is plowed. Then make rich with farm yard manure free from weed seeds or which has been so rotted as to kill the vitality of the seeds and with bone meal. If manure cannot be had use 500 lbs. of bone meal to the acre. Work this into the land and then sow plenty of seed, at least 2 bushels to the acre and harrow in.—Ed.

FENCE POSTS—SICK SHEEP—BLOODY MILK.

1. Will sassafras make good fence posts? Have been told that they will last as long as locust, but had rather hear from some one having had experience with them before using many.

2. Several of my sheep had very bad cough last fall which lasted them all through the winter. They seemed to almost choke when coughing, in fact I thought at first they were choked on turnips, would sometimes cough up some thick matter and run some at the nose. I thought they had distemper and gave them pine tar and rubbed some on their noses. They would eat but little of anything, consequently were very thin in order by lambing time and the lambs all died as fast as they came, not living more than a day or two. Two of the ewes died in May after they had been on good pasture for some time. Four have gotten over the cough and are now taking on some flesh, while one does not get any better, eats but little and is very thin, some spots on her where the wool has not grown any since clipping and the skin looks hard and papery. Other sheep in the flock that have not been troubled with the cough are well and fat. What is the trouble and what remedy?

3. I have a cow that has been giving bloody milk for some time. Does not appear to have had a blow on the udder and there is no fever. Some times little clots of blood will pass and is worse some days than others and it comes from all the teats. Have not used milk for three weeks. It got this way some time ago, but did not last but few days. I thought then it was on account of coming in season but that cannot be the case now. Calf is about ten weeks old. Been letting it suck some up to about a week ago, then kept it away to see if that would have any effect. Cow is in good order, eats hearty and seems well in every other way. Is she likely to get over it or would you advise drying her up and making beef of her?

Have been reading the Planter for several years and like it very much.

S. R. HILL,

Henry Co., Va.

We have never had any experience with sassafras for fence posts nor can we find any reports of their use and therefore cannot advise you. The Forestry Department of the Depart-



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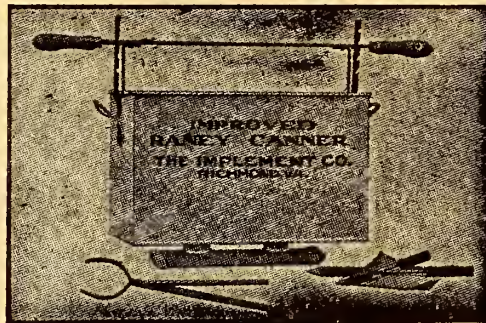
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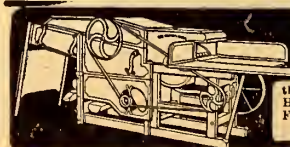
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ment of Agriculture at Washington is making experiments with different kinds of fence posts and very probably are testing sassafras. If you will write this department they will gladly tell you all they know about them.

2. We think the trouble with your sheep in the first instance was simple catarrh caused very probably by climatic conditions. This no doubt, from inattention at the first of the attack gradually developed into epizootic catarrh and for the latter disease there is practically no remedy. The result of treatment may in some cases be partial recovery, but the sheep never recover sufficient vitality to be worth keeping. If when the catarrh first attacks the sheep they are given, shelter in a clean, airy shed and fed warm bran and linseed mashes for a few days and the following powder is blown into the nostrils several times a day, complete relief will usually be secured. Take equal parts finely pulverized sub-nitrate of bismuth and gum arabic and mix them and blow into the nostrils through a quill as much of the powder as will lie on a dime twice a day. A tonic of ground ginger and gentian 1 to 2 drams of gentian and half an ounce of ginger may be given with advantage. It may also be that worms infested the sheep—either the stomach or the knotty gut worms. If this be so your other sheep and lambs will soon show symptoms of the trouble, especially the lambs. Tobacco is the remedy for these. Let the sheep have what tobacco they will eat.

3. Blood may come with the milk for a variety of causes. It may be from injury to the udder, or when it is congested or inflamed, when the circulation through it has been suddenly increased by richer and more abundant food or when the cow is in heat or it may arise from eating acid or irritant plants, deposits of tubercle or tumors in the udder, or induration of the glands may be the cause. The treatment will vary with the cause. In congested glands which is a most frequent cause, give 1 lb. of Epsom salts and daily thereafter half an ounce of saltpeter with a dram of chlorate of potash and bathe the bag with hot or cold water and rub with camphorated lard. If it arises from tubercle deposits or tumors there is no available remedy and the cow should be dried and fed.—Ed.

IMPROVING LAND.

I have a field that I am trying to improve and at the same time get some returns from it. It is now drilled in black peas and I want to follow the peas with crimson clover and plant it to corn next year. Would you advise cutting either the peas this summer or the clover next spring for hay, or fallow both. What

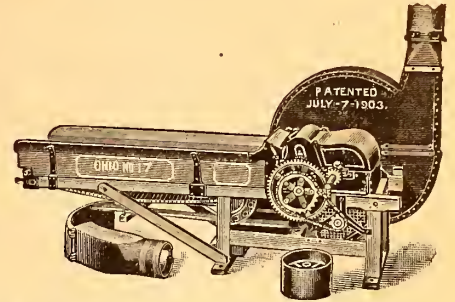
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kind, if any, fertilizer would pay best on the clover and corn. I sowed 150 lbs. 14 per cent. acid phosphate per acre on the peas.

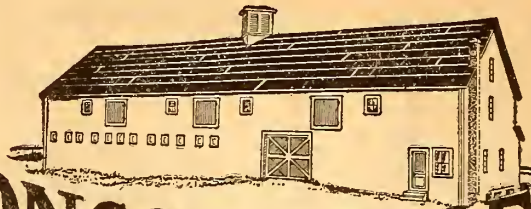
J. W. ADAMS.

Dinwiddie Co., Va.

No doubt the great need of your land in order to make it productive is humus, vegetable matter, in the soil. This is the greatest need of all the land in Southside Virginia and much of it elsewhere in the State. To get this cheaply and quickly is the way to make the land profitable and the only way to accomplish this end is to grow and turn under leguminous crops. Whilst we are always averse to advising the plowing down of a good food crop if we can be assured that if cut and cured it will be made into feed for stock and the resulting manure be applied to the land yet there are times when it is the wisest policy to sacrifice the feed value of a crop for the sake of the humus value. When one is just starting to improve a piece of poor land it is almost always the best course to turn under the first two or three crops. They are usually light and would only make a small quantity of feed whilst they will make comparatively a good deal of humus. If therefore you want to make the most and quickest progress with your work turn under both the crops but if you cannot afford to do this then cut the peas for hay leaving a good stubble which cut into the land with the disc harrow or plow down and sow the crimson clover with a mixture of wheat, oats and rye with it to ensure a good winter cover and turn this crop down in the spring for the improvement of the land. Acid phosphate is the best fertilizer you can use for this land for the crops you name. Apply 250 or 300 lbs. to the acre.—Ed.

APPLYING MANURE TO LAND— CORN SMUT.

I have read after Prof. Massey, Terry and other men of intelligent practical farm experience. They say take the barn yard manure from the barn to the field at once if possible. This all may be proper, but I wish to know whether this will in time affect the mechanical condition of the soil. For the last two falls I have plowed my garden then put on the manure all through the winter until I plow it again in the spring. It appears that the manure keeps the ground wet and it thus breaks up in clods and though you work on it with harrow and clod crusher still there remain so many little clods that it



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makes it hard to get little seed up. Does the manure thus spread all through the winter thus affect the mechanical condition of the soil, if it did in time it would be most difficult to prepare the soil so that the plants would get proper food from the soil. I suppose the manure would be all right on sod and you know that it is well to have sod on the ground in winter but please tell me about this also. I am experimenting in the garden and I find it is a good place to make the experiment. Could you also tell me the cause of those white looking lumps of growth on the green growing corn? These are somewhat coarse or pithy and greatly affect the productiveness of the corn. You see it here and there on a stalk as you go through the field. I would like to know the cause of it. Please answer all this in your August number of the Southern Planter. I love to read the Planter and every farmer ought to have it.

The lay of this garden may have all to do with it keeping wet and coming up in clods. It lies on side hill is of a clay nature and seems to be springy in places.

J just came from a patch of corn "Iowa Dent," yellow corn, and the growth I referred to above has broken open and I see that it is corn smut. What is the cause of corn smut and how remedied?

REV. D. E. DAY,

Gilmore, Ohio.

In the April issue of the Planter on page 392 you will find the results of experiments made in Maryland as to the application of manure to land at various times. Send to the Maryland Experiment station and ask them to send you the Bulletin on the subject. The experiments made in various parts of this country and elsewhere seem conclusive as to the advisability of applying manure directly from the stables to the land. For the best results in a garden or for the growing of truck crops where a highly fertile and fine mechanical and physical condition of the soil is necessary to quick success, composting before applying is very often advisable. The cost of this can be borne by garden or truck crops of high value where in the production of staple crops on the farm such a course would be too costly. We think that probably in your case the nature and situation of your land has much to do with the results you find. In our own experience in thus applying manure directly without composting we never found this trouble to be in any way serious. The mixing of the manure in the soil in the early spring in preparing it for the crops let in the air and sun and a fine seed bed was quickly formed. As to corn smut. This is a fungoid disease which is spread in the crop by spores given off by the smutted stalks. Ma-

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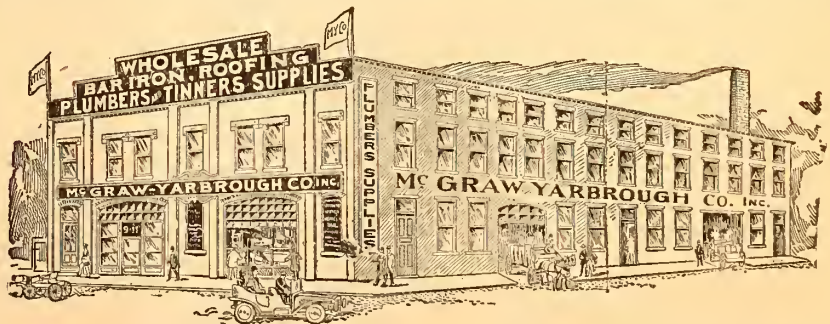
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nure applied to land in which smutted stalks have been mixed will infest the land and perpetuate the disease in the next crop. The only remedy and preventative is to burn up every bit of smut as soon as found and all stalks upon which smutted ears have been produced.—Ed.

MARVELOUS ONE MAN BALER.

Just think of the benefits of a press that one man can operate, and with one horse bale a ton of hay an hour. This is possible because it has an automatic self-feeder, and a wonderfully ingenious, yet simple device for self-threading of the bale wire, so that no partition blocks are necessary. A great time and fork saver is the hopper with bars at the side instead of being solid. This permits the tines of the fork to go through instead of hitting the side when the hay is being put in.

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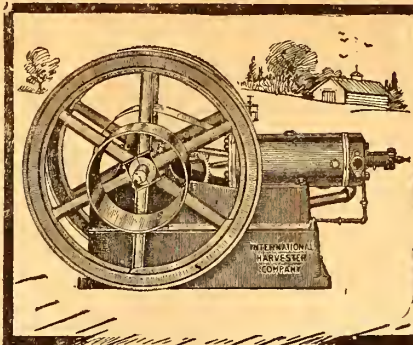
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Powhatan Co., Va., April 1, 1908.

We think the Southern Planter the best agricultural journal in America. We take a number of others, but for a well gotten up agricultural journal yours takes the cake.

M. W. NICHOLLS.



A Reliable Power as a Farm Help

established a new order of things. Any one who will carefully consider the matter must see that they are money makers and money savers.

They make short, easy, pleasant work of what always has been hard, slow work.

They save the farmer's strength, save him wages of hired men, save time, and enable him to do more work and make more money out of his farm than ever was possible before.

There is no doubt that on the average farm an I. H. C. gasoline engine will more than repay its first cost each year.

The nice adaptation of these engines to all farm duties is one of their most excellent features.

They are built in:—
VERTICAL, 2 and 3-Horse Power.
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AIR COOLED, 1-Horse Power.
Also sawing, spraying and pumping outfits.

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It will be to your interest to investigate these dependable, efficient engines. Call on the International local agent and get catalogues and particulars, or write the home office.

FARMERS are getting over doing things the hard, slow way. The very general use of farm powers is an example.

As a matter of fact, the farmer has as great need of a reliable power as the mechanic.

Take the average barn for illustration. Locate one of the simple, dependable I. H. C. gasoline engines, such as is shown here, outside the barn door, or within the barn, for that matter, and what a world of hard labor it will save! You will have a power house on your farm.

It will shell the corn, grind feed, cut ensilage, turn the fanning mill, pump water, run the cream separator, elevate hay to the mow, and do a dozen other things.

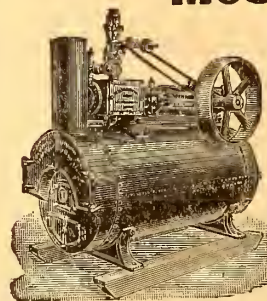
The old way was to use the horses in a tread power or on a circular drive, to operate a complicated system of gear wheels.

The consequence was that most of the hard power jobs were hand jobs.

I. H. C. engines, being so simple, so efficient, so dependable, and furnishing abundant power at so little cost, have

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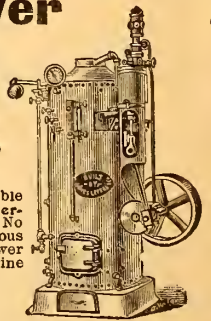
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HISTORICAL WRITERS OF THE
SOUTH.

Mary Washington.
Article No. 3.

ALEXANDER H. STEPHENS.
1812—1883.

Alexander H. Stephens, Vice President of the Southern Confederacy, was born in Georgia, Feb. 11th, 1812. He was a self-made man and his early life was severe, laborious and self-denying. But in spite of the difficulties imposed by poverty and ill health, he became a lawyer and politician of great reputation and popularity. He was one of the Whig leaders of the State until about 1850 when he drifted into the Democratic party on account of the rising discussions of slavery. He served in Congress from 1843 to 1859. In 1860, he opposed secession warmly, but when his State seceded he followed her, and was elected Vice President of the Confederate States.

His chief work appeared in 1868, entitled "A Constitutional View of the War, between the States, the cause, character, conduct, and results." His political views on the subject of secession and the war are ably given in this work. He also wrote a school history of the United States. He also wrote many speeches, addresses, orations and letters belonging to the province of politics. His powers as an orator were remarkable. He enjoyed unbounded popularity in Georgia. He was elected representative in Congress 1877-82 and Governor in 1882-83, dying in office. He was feeble and emaciated, always in delicate health, seldom weighing over 90 lbs. What he achieved in life was a signal instance of the triumph of mind over matter.

R. R. HOWISON.

Robert R. Howison was born June 22d, 1820, in Richmond, Va. He was a lawyer of high standing as well as an author. His works were as follows:

"History of Virginia from its Discovery and Settlement by Europeans to the Present Time." (1847) 2 octavo vols.

"Lives of Gens. Marion, Morgan and Gates." 1848.

"History of the War Between the United States and the Confederate States."

"Report of Joint Committee of Confederate Congress on the Treatment of Prisoners of War."

This report was written by Mr. Howison as secretary of the Committee and was first published in March, 1865. It was republished in various Northern papers, and is given in full in Pollard's "Lost Cause."

Howison ranks high with historical writers of the South, being classed with Gayarre and other men of that stamp. He was a very faithful and pains-taking student, laboring earnestly to sift, examine and verify every statement of fact introduced into his histories.

W. H. TRESPOTT.

William Henry Trescott was a na-

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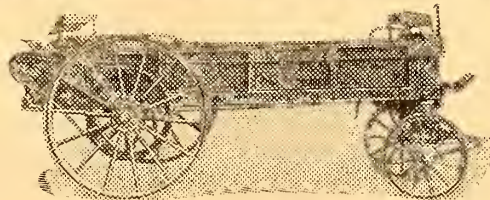
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tive of Charleston, S. C., born in 1823. He repeatedly served in the State Legislature and always commanded a large influence. His English was the best heard in those legislative assemblies, as he invariably used pure and correct language. He was an historical writer, but made an exclusive study of the diplomatic history of the periods of which he treated. Everything he wrote (except for tribute memoirs) relates to diplomacy and on this subject he was admitted to be the highest authority in the South.

He was the author of:

"The Diplomacy of the Revolution." A historical study, published in New York, 1852.

"A Letter on the Diplomatic System of the United States" 1854.

"Diplomatic history of the Administration of Washington and Adams." 1789-1801. Duodecimo. Published 1857. M. J. SPAULDING.

Amongst religious historians I may mention Archbishop Martin John Spaulding of Kentucky, who was born about 1808. No prelate in the United States stood higher for ability as a scholar or devotion to the interests of his church. His "History of the Reformation," in two large volumes is said to be one of the most searching and exhaustive histories ever written, from the papal standpoint. He also wrote "Evidences of Catholicity" Missions in Kentucky" and Miscellanies."

JOHN ESTEN COOKE. 1830-1886.

John Esten Cooke though more generally known as a novelist also essayed the role of historian his first literary work after the close of the war being "The Life of Stonewall Jackson." 1865. He also wrote later the life of Robert E. Lee. Besides this he wrote a history of Virginia for the young and edited the life of Capt. John Smith.

He was born in Winchester, Va. Nov. 3d, 1830. His father was a distinguished lawyer, and his mother was Maria Pendleton, descended from the Revolutionary family of that name. John Esten Cooke himself was bred up to the law, but gave up that profession to devote himself to literature. He fought through the war, and then returned to his literary career which he followed till the time of his death. Sept., 1886. His novels written after 1865 are deeply imbued with the spirit of the war and filled with the events as he interwove into their pages the stirring and romantic experiences of those days. This is especially the case with "Mohun," "Hilt to Hilt," and "Surrey of Eagle's Nest."

DR. J. L. M. CURRY.

Amongst the most thoughtful and best considered historical works that have appeared in the South since the Civil War, I may mention "The Southern States of the American Union," and "Civil History of the Confederate States," by Dr. J. L. M. Curry.

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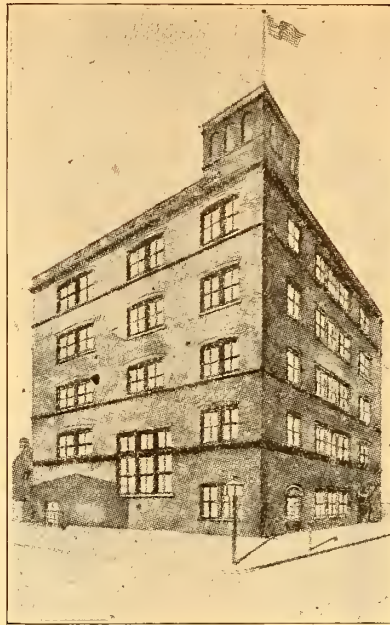
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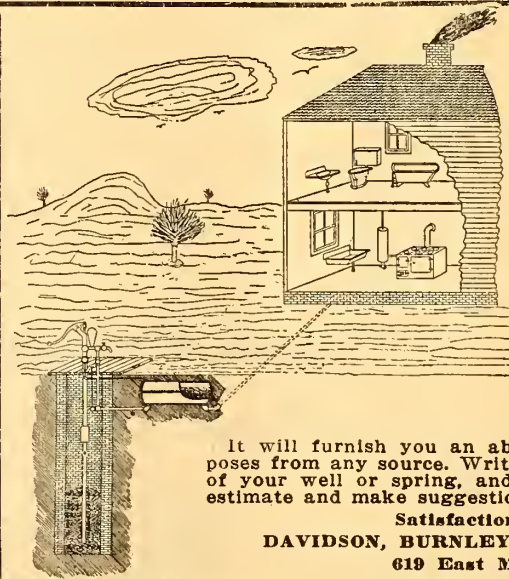
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In the June and July numbers appeared specimen classifications of the CATTLE PREMIUMS. These premiums are Comprehensive and Liberal. For most breeds there are three grades of premiums—1st, 2nd, and 3d—and for some animals, 4th, 5th and even 6th premiums have been provided. The premiums for Short Horns total \$980; for Virginia Beef Breeds, \$505; Herefords, \$550; Aberdeen-Angus, \$500; Red Polled, \$850; Holstein-Friesians \$400; Ayrshire, \$400; Jerseys, \$400; Guernseys, \$400; Dutch Belted, \$425; Galloway, \$255; Brown Swiss, \$255; Fat Cattle, \$165; Virginia Dairy Cattle, open to all cows and heifers owned in this State three months prior to the Fair, \$200; making \$6,285.00 for cattle.

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In the Horse Department (Exhibition) the premiums amount to \$3,420, of which the sum of \$200 is offered for Shetland and other ponies, and \$500 for Mules, Jacks and Jennets. Nine Gold Medals, Champion Cup value of \$100; Diplomas and reserve ribbons are offered for Percheron Horses by the Percheron Society of America; and a Cash Premium of \$100 for the best Saddle Stallion or Mare by the American Saddle Horse Breeders' Association. (For Details of all special premiums see Premium List.)

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For all information as to Time of Closing Entries, Transportation Arrangements, and the Rules and Regulations of the Fair, consult Premium List.

For copies of the Premium List and any particulars desired, address,

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Or call at the Office of the Virginia State Fair, No. 819 East Main Street, Richmond, Va.

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The premiums for farm products cover everything of value produced on the soil, in the way of wheat, rye, corn, oats, barley, hay, Soy beans, cowpeas, sorghum, millet, etc. Also for most complete display of varieties of whole plants, including wheat, corn, clover and grasses; sweepstake premiums for wheat and corn; and display of grain, grasses and forage crops, in grain and stalk.

THE VEGETABLE LIST COVERS EVERYTHING PRODUCED IN THE GARDEN. Don't overlook the County Exhibits.

THE TOBACCO PREMIUMS have been increased and comprise olive stems and brown shipping (sun cured) and "flue cured" wrappers, cutters, fillers and smokers.

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Will be one of the features of the Fair, and the Virginia State Horticultural Society will assist in making it a success, out of the appropriation granted by the General Assembly of Virginia.

There are liberal premiums for the best varieties of apples grown in the State, also for pears, peaches, plums, grapes and nuts; premiums for collections, new varieties, etc.

COUNTY EXHIBITS of fruit can be made, there being two divisions with the Blue Ridge as the dividing line. For each division there is a first premium of \$100, and a second of \$50, with a ribbon for third.

Fruit Package and Nursery Exhibits are included in the Horticultural Department.

PLANTS AND FLOWERS.

This will be made one of the attractions of the Fair. Nice Premiums, some of \$10. A "Professional List" and one for non-professionals, or amateurs, so that everybody, firms and individuals, can compete.

DOMESTIC MANUFACTURES, ARTS, ETC.

This is a department that appeals especially to "farmers' wives and daughters" and the wives and daughters of business and professional men as well. Good premiums offered for exhibits in this department.

Ladies should exhibit their choicest needlework and embroidery.

This is the great preserving and canning time. Get ready ladies, your preserves, jellies, pickles and jars of fruit and vegetables. Show what Virginia can do in this line, and get the handsome cash premiums and beautiful ribbons.

ART WORK, paintings, drawings, etchings, sketches, etc., are desired, and all exhibits will be well displayed and cared for.

Bread and cakes, pies, biscuits, Sally Lunn, and every toothsome thing will be acceptable.

LIVE STOCK SALE.

Farmers and Stock Raisers of Virginia: Don't forget the Live Stock Sale to be given during the Fair in the Live Stock Pavilion. Write the General Manager for particulars.

Dr. Curry was a man of many noble and varied gifts, and of great versatility. In the course of his life, he filled many offices and filled them all ably and faithfully. By turns, he played a conspicuous part in educational, political and religious affairs, adding authorship, moreover, to his other avocations, but he will I believe, be known and revered by posterity chiefly as a great and earnest educator. He was born in Georgia, but became a citizen of Alabama in early life. He represented the latter State in the Federal and afterwards in the Confederate Congress. He became a minister of the Gospel and afterwards a college professor, and since the war he represented the United States acceptably at the Court of Spain. He made such a favorable impression that he was sent there again, as representative of our government at the coronation of the young king. In this connection I may mention that one of Dr. Curry's historical works was on "The Government and Constitutional History of Spain."

He was trustee of the Peabody fund and the Slater fund for promoting education in the South and his wise counsels contributed no little to the judicious management of these funds. Few men have been so generally beloved and esteemed, by all parties, classes and sections. He died in Feb. 1903, and his death brought a distinct sense of loss, not only to the South, but to the whole country, for his usefulness, his popularity and his fame were not limited to one section, but were national. He was a well-balanced, broad-minded, thoroughly well-informed man whose moral and intellectual natures were both on a very high plane.

Texas claimed the honor of putting in the first memorial window in his honor in the Houston Normal Institute, bearing the following inscription after his name, and the date of his birth and death:

"Soldier, Author, Statesman, Educator. Great in intellect. Great in character. Great in service."

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Judge.—"Have you been arrested before?"

Prisoner.—"No sir."

Judge.—"Have you been in this court before?"

Prisoner.—"No, sir."

Judge.—"Are you sure?"

Prisoner.—"I am, sir."

Judge.—"Your face looks decidedly familiar. Where have I seen it before?"

Prisoner.—"I'm the bartender in the saloon across the way, sir."—Harper's Weekly.

Lee Co., Va., Mar. 19, 1908.

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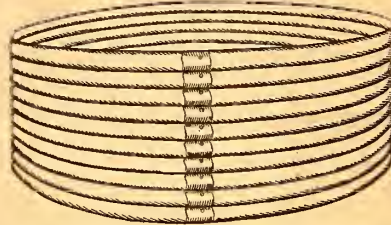
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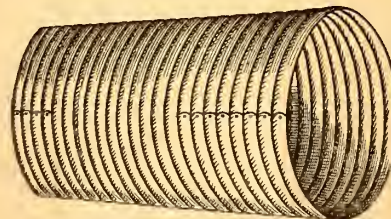
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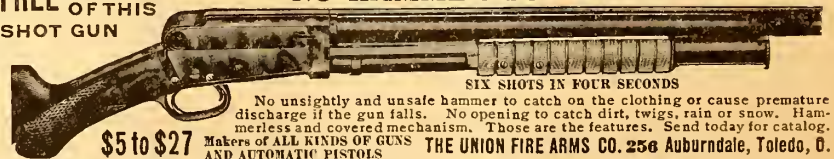
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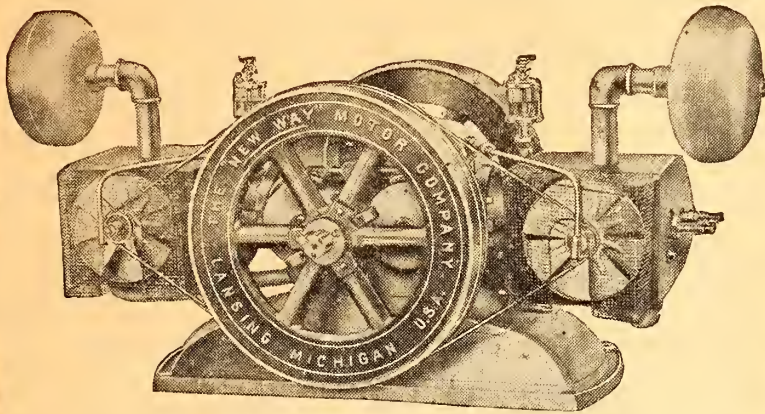
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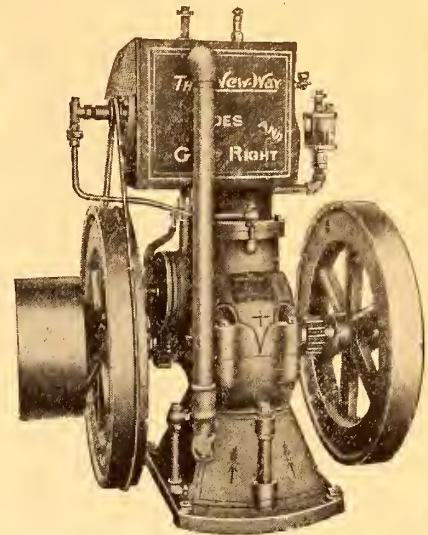
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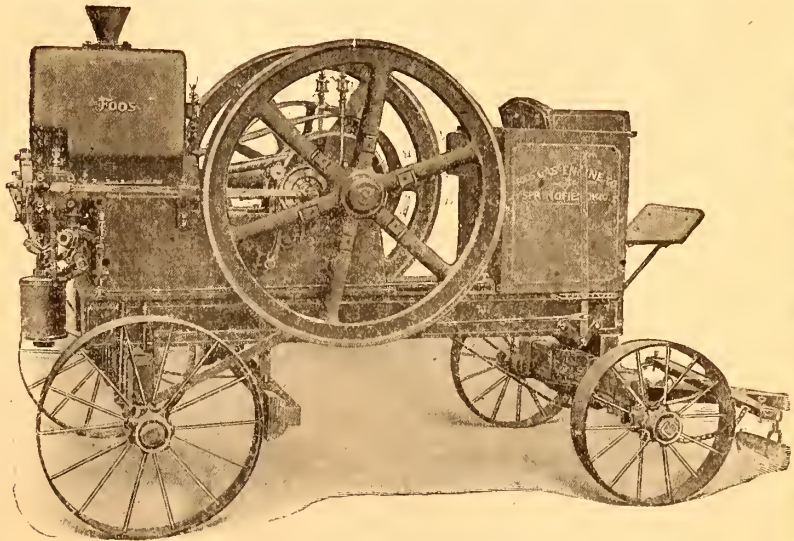
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NOTICE! Farmers' Institute, Richmond, August 4th.

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ASHTON STARKE,

1422 East Main Street,

Richmond, Va.

WASHINGTON NOTES.

Roosevelt Fights Hydrophobia.

The District of Columbia is coming to be a sort of model for the country at large in the matter of many trials of new plans, regulations and laws. Particularly during the present administration the President has exerted his influence, sometimes successfully, sometimes not, to "try on" new ideas in Washington, as much, apparently, for the purpose of establishing a precedent and making a beginning as for actually improving the local conditions. Thus the Child labor law, applicable to the District of Columbia, was forced through Congress, largely by Presidential pressure. The Department of Agriculture has worked out with the President's active support, what it is hoped will prove ideal sanitary milk regulations and the latest thing is an order requiring the muzzling of all dogs in an effort to eradicate hydrophobia. Not so successful was the White House recently, in an attempt to secure a jail sentence, instead of a fine, for the first conviction under violation of the Pure food law. A president of a bank and proprietor of a patent medicine was convicted under the law, and the President wrote a letter to the District Attorney asking him to secure if possible, a prison sentence which would show the country generally that the Pure food law was not to be trifled with. The District Attorney tried but the Judge didn't see it that way and let the offender off with a fine.

Ever since the country was shocked at the terrible death by hydrophobia of W. M. Marsh, the prominent Brooklyn manufacturer, Washington has been agitated over the prevalence of this disease among its dogs and a bitter controversy has progressed over dog muzzling. A good many children have been bitten by dogs, and the brains of the latter examined by the Department of Agriculture have shown the germs of the dread disease. Attacks by mad dogs became so numerous that Secretary Wilson, Chief A. D. Melvin of the Bureau of animal industry, and Dr. John Mohler, chief of

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the Division of Pathology, took a vigorous stand in favor of muzzling all dogs in the District.

President Takes a Hand.

The District Commissioners, supported by a faction which protested against having dogs inconvenienced by muzzling, held out against this protective measure, until the President, himself a lover of animals as everyone knows, concluded the row had gone about far enough and addressed a note to the three Commissioners (who govern the city in place of a mayor) inquiring their reasons for not issuing a muzzling order and suggesting that he would like to see such an order issued that afternoon. This ended the controversy and the order was issued at once.

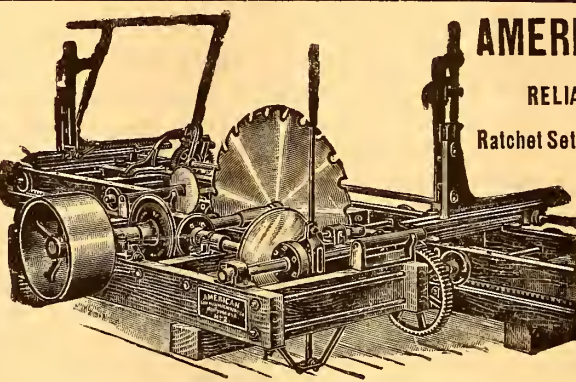
The contention of the Department of Agriculture is that hydrophobia or rabies is a most terrible and dangerous disease, communicated to both man and beasts and that unless repressive measures are taken it will grow to an alarming extent. It is communicable to any animal and a bite from a horse suffering with the disease is as deadly as that from a dog or cat. Muzzling, however, is an effective eradicator. Doctor Mohler, who is probably one of the best informed experts on the subject in the country, has made a strenuous fight to secure the muzzling order and it was his and Secretary Willson's argument which led the President to take a hand in the matter.

Stamped Out in Europe.

"Hydrophobia can be stamped out in Washington and in the entire United States," said Doctor Mohler. In Holland, in 1875, rabies was quite prevalent and dog muzzling was established. The disease immediately began to disappear and in 1879 only three cases were reported, since which time the country has been free from the disease, except along the Belgian border.

Cattle Loss, \$63,250,000 Yearly.

It is the consensus of opinion among experts that one of the chief reasons for the high price of dressed meats



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is the fact that cattle are not increasing fast enough to meet the demands of the meat-eaters. While it may not be possible to force an increased raising of cattle among the stock-growers of the country, the Agricultural Department is doing what it can to remedy the deficiency, through eradicating disease and destroying the fever ticks' the little plagues that have been responsible for a loss of \$40,000,000 worth of cattle annually in the State of Texas alone, and \$23,000,000 loss in other parts of the South, making a reduction in the cattle supply of the nation of \$63,250,000 a year.

Within two years, with an appropriation for the fiscal year of \$250,000, and a like sum appropriated by the States in the affected districts, an area of about 56,000 square miles, or almost the size of the State of Georgia, has been freed from the ticks. Last year work was done to a greater extent in the States of Virginia, North Carolina, South Carolina, Georgia, Alabama, Tennessee, Kentucky, Missouri, Arkansas, Oklahoma, Louisiana, Texas, and California, and it is proposed to continue in the same States with the addition of a small portion of Mississippi.

Most of the work has been and will continue to be done in sections con-

tiguous to the quarantine line, the object being to push the line further South from year to year; but encouragement is given to local work in any part of the quarantined district in the assurance that when any considerable area is rendered tick free it will be released from quarantine.

Various methods for extermination of the ticks have been adopted, including transferring the cattle from pasture to pasture at suitable intervals, and dipping, spraying, and hand dressing the cattle with oil and oil emulsion. In sections where there are large herds and large ranches, dipping on a large scale is practiced, either alone or in connection with pasture rotation, while in other sections, where the cattle on some farms frequently consist of a cow or an ox team, hand dressing with oil is found to be the only practicable method.

SUCCESS POSSIBLE.

To wipe out this heavy loss is the object of the work now under way, and the results already accomplished leave no doubt that success is possible, though a number of years will be required for the completion of the undertaking. Much depends upon the cattle owners, who can either hasten or retard progress according as they

co-operate or refuse to assist in the work.

It is the opinion of the officials of the Department of Agriculture that with such an outlook for eradication, it is reasonably safe to presume that the next decade will see the end of the fever-tick. This not only would wipe out the loss of \$63,250,000 annually, but with the natural increase, the profit, as a result of the elimination of the ticks, soon would reach \$100,000,000 a year.

The Agricultural Department Bureau of Statistics estimates that from 81 to 83 per cent. of the corn crop is now used for feeding purposes in the United States; but that 80 per cent. of it is shipped out of the countries in which it is grown. If these latter figures are correct, there is room for wide improvement in farm management, home feeding and keeping the fertility on the farm.

June 1, Chicago wheat was \$1.07 a bushel, against .98, June 1, 1907; corn was .71, against .52 last year, and oats .52, against .42 a year ago.

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Bay horse, foaled 1906, by Kelly, 2:27, son of Electioneer and Esther, by Express; dam Maggie Johnston, by William O. Watkins. Kelly is a full brother to Expressive, 2:12½ an dash sired McChesney, 2:16¼; Lucy Montrose, 2:23¾, etc.

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Bay horse, 16.1 hands; weight 1250 pounds. Sired by Norfolk, 3670, dam Mambrino, by Mambrino King, 1279.

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NOTE: We are offering for sale at attractive prices, two young hackney stallions, one and two years old, both registered and splendid individuals.

REPORTS.

United States Department of Agriculture, Washington, D. C. Bureau of Biological Survey. Circular 32. Directions for the destruction of prairie dogs.

Bureau of Chemistry. Circular 39. Benzoic acid and benzoates, their influence on digestion and health.

Office of Experiment Stations. Experiment Station record, Vol. XIX, No. 10.

Farmers' Bulletin 246. Saccharine Sorghum for forage.

Farmers' Bulletin 322. Milo as a dry land crop.

Farmers' Bulletin 324. Sweet potatoes.

Bureau of Agriculture. Dept. of the Interior, Manila, P. I. The Philippine agricultural review. Vol. 1, No. 3.

Kansas Experiment Station, Manhattan, Kas. Bulletin 153. Deterioration of red Texas oats in Kansas.

Bulletin 154. The mound building prairie ant.

Press Bulletin. Russian Seed wheat.

Kentucky Experiment Station, Lexington, Ky. Bulletin 132. Commercial Fertilizer.

Bulletin 133. Spraying apple trees. Apple orchard pests in Kentucky.

Maryland Experiment Station, College Park, Md. Bulletin 126. Manuring and fertilizing truck crops.

Bulletin 127. Miscellaneous greenhouse notes.

Bulletin 128. The effect of animal digestion and fermentation of manure on the vitality of seeds.

New Mexico Experiment Station. Agricultural College, N. M. Bulletin 66. The range problem in New Mexico.

Bulletin 67. Chile culture.

Oregon State Dairy Association. Convention, Portland, Ore. W. L. Crissey, Sec'y-Treas. Portland, Ore. Report of the 1907 Convention.

Rhode Island Experiment Station, Kingston, R. I. Bull 126. Feeding Experiments with Chickens, Cockerels and Turkeys.

Rhode Island Experiment Station. Kingston, R. I. Bulletin 127. Some recent feeding experiments.

South Carolina Experiment Station. Clemson College, S. C. Bull. 136. The Manufacture of Starch from Sweet Potatoes.

South Dakota Experiment Station. Brookings, So. Dak. Bulletin 105. Stock food for pigs.

Bulletin 106. Sugar beets in South Dakota.

Bulletin 107. Sheep scab.

Bulletin 108. New hybrid fruits.

Texas Experiment Station. College Station, Tex. Bull. 99. The Composition and Properties of Some Texas Soil.

Bull. 102. Texas Honey Plants.

Bull. 103. Forage Crops in North West Texas.

Virginia Experiment Station, Blacksburg, Va. Circular No. 1. Sugar Beets in Virginia.

Virginia Department of Agriculture and Immigration, Richmond, Va. Dairy and Food Division. Circular No. 1. Regulations as to Manufacture, sale and inspection of food and dairy products.

Bulletin. Analysis of Fertilizers. April, 1908.

Virginia Weather Service, Richmond, Va. Report for May, 1908.

Virginia Experiment Station, Blacksburg, Va. Bulletin 176. Hog feeding.

Virginia Weather Service, Richmond, Va. Report for June, 1908.

West Virginia Experiment Station, Morgantown, W. Va. Bulletin 117. Tomato notes.

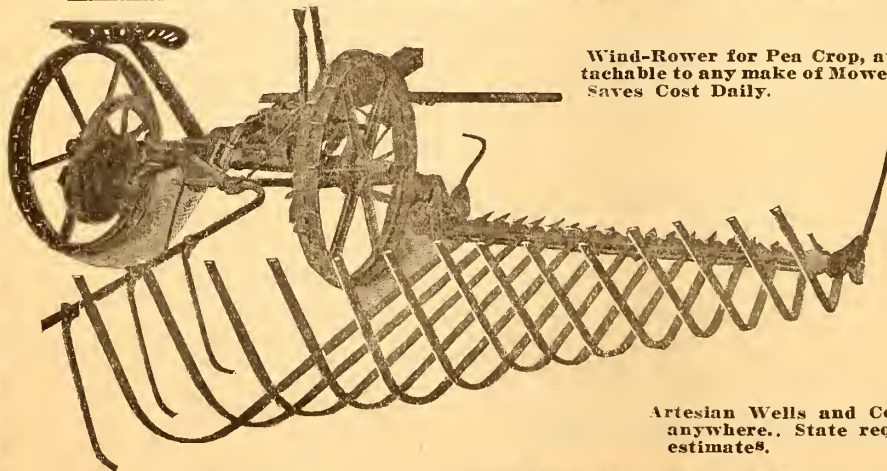
West Virginia State Board of Agriculture. Charlestown, W. V., Report of the Board for quarter June 30, 1908. Forestry.

West Virginia State Board of Agriculture, Charleston, W. Va. Report of the Board for Quarter Ending, March 30, 1908.

West India Department of Agriculture. Barbadoes, W. I. West Indian Bulletin Vol IV. No. 1.

Wisconsin Experiment Station, Madison, Wis. Bull. 158. The Grade

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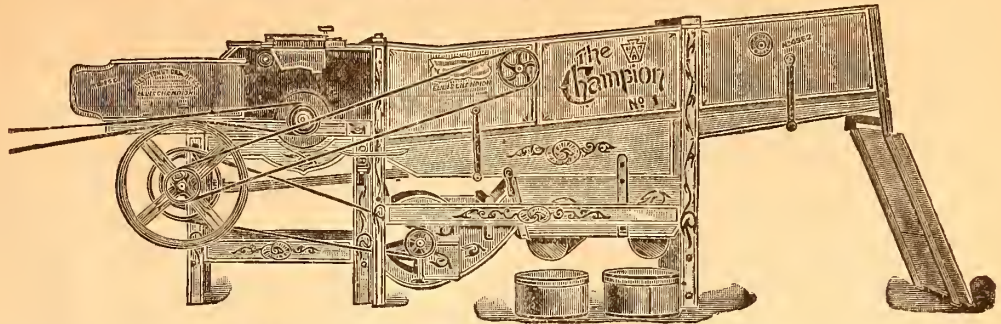
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 Cleaners**



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 thoroughly 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.

Stallion Situation in Wisconsin.
 Bull. 162. Rusty Cans and Their Effect Upon Milk for Cheesemaking. Wyoming Experiment Station, Laramie, Wyo. Bull 76. Wyoming Forage Plants and Their Composition.
 Catalogue of the School of Agriculture and Experiment Station of Pennsylvania State College, April, 1908. State College, Pa.
 University of Virginia Record. Summer School, July 18 to July 31, 1908.
 Bulletin of the Virginia Polytechnic Institute and State Agricultural and Mechanical College Catalogue April, 1908. Blacksburg, Va.

Smyth Co., Va., Feb. 14, 1908.

I consider the Southern Planter the best farm journal in the South.
 T. B. RECTOR.

Shenandoah Co., Va., Feb. 14, 1908.

Through the Southern Planter you have done and are doing a grand work for Southern Agriculture. I am a subscriber to quite a number of agricultural papers but yours is the one indispensable. I wish you abundant success in your noble work.
 R. L. CAMPBELL.

Stafford Co., Va., Feb. 15, 1908

We appreciate the Southern Planter very much and think it very fine.
 F. D. MONCURE.

Loudoun Co., Va., Feb. 14th, 1908

I read the Southern Planter with a great deal of interest and profit. every farmer should have it.
 J. JONES.

TREES.

WHOLESALE
AND
RETAIL.

**First Class Nursery Stock
of all kinds.**

We make a specialty of handling dealers' orders.
ALL STOCK TRUE TO NAME.

Apples,	Nectarines,	Pecans,	Ornamental and
Pears,	Cherry,	Chestnuts,	Shade Trees,
Peach,	Quinces,	Walnuts,	Evergreens,
Plum,	Almonds,	Small Fruits,	Roses, Etc.
Apricots,			

CALIFORNIA PRIVET. for Hedging. WRITE FOR CATALOGUE.

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TATE SPRING "The Carlsbad of America"

Offers unusual attractions to the health and pleasure seeker. Hotel thoroughly modern, elegantly furnished rooms en suite with private baths, electric lights, steam heat. Excellent golf course; grassy lawns. Scenery unsurpassed—unlimited outdoor attractions. Easily accessible from principal cities.

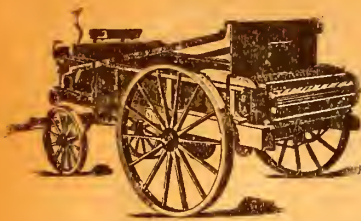
TATE SPRING WATER
 For indigestion, dyspepsia and all other stomach troubles, this water has been famous for more than half a century. Endorsed by the most eminent physicians, and thousands of leading citizens. Water shipped thoroughly sealed to all parts of the United States. Write for handsome booklet, giving full information regarding hotel and water, letters of endorsement, analysis, etc. Address

THOMAS TOMLINSON, Owner, Tate Spring, Tenn.

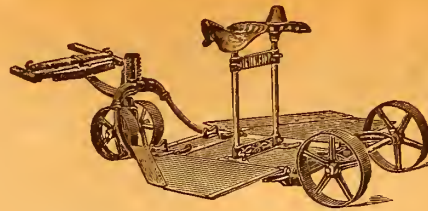
Chesterfield Co., Va., Mar. 9, 1908.
 The Southern Planter has been a great benefit to me.
 J. R. F. BURROUGHS.

Roanoke Co., Va., Mar. 9, 1908.
 I cannot afford to be without the Southern Planter.
 MONROE GARST.

LEADING 1908 UP-TO-DATE LABOR SAVING 20TH CENTURY MACHINERY.



Kemp's Twentieth Century Improved Manure Spreader. Made in five sizes. Write for special Catalogue and prices.

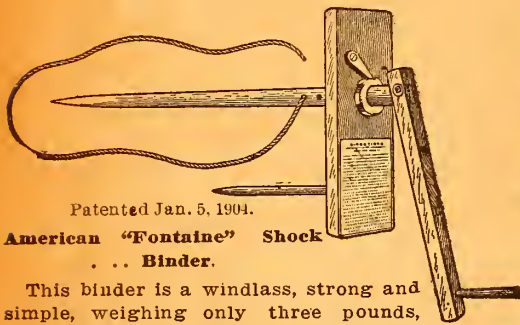


SCIENTIFIC STEEL CORN HARVETER. The best Harvester on earth for standing corn. Safety Seats. Safety Shafts.



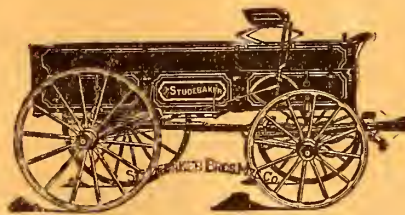
OLIVER SULKY PLOW NO. 11.

Light, durable and effective. Simple and novel device for turning. Plow the most difficult soils and does it well. Can be used with or without tongue. Depth easily regulated. Turns square corners without lifting out of ground. Made in both right and left hand. The No. 11 Sulky Plow can be fitted with either the No. 20 or 40 regular steel beam plow. Write for circulars and prices on Riding and Gang Plows.



Patented Jan. 5, 1904. American "Fontaine" Shock Binder.

This binder is a windlass, strong and simple, weighing only three pounds, and will last a lifetime. One pound pressure on the handle pulls sixteen on the rope, so that one man with it can easily apply a pressure of over 500 pounds, thereby compressing a shock at the top so tightly that it will not fall or be blown down, and will not be injured by getting wet inside when it rains. Both ends of the rope are drawn by this binder so that the shock is compressed evenly without being pulled over to one side.



Special Prices given on Studebaker and Brown, Wagons, Buggies and Carts.

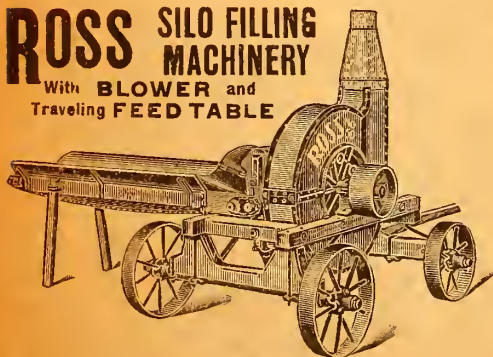


ANTI-DIRT MILK PAIL.

First. It prevents dirt, hair and other substances from dropping into the milk while milking.

Second. It strains the milk twice through two fine strainers while milking.

DON'T FORGET! All the merchant in town who claim to sell Oliver Chilled Plows and Repairs only sell the imitation, bogus cheap goods. The only store in Richmond, Va., to buy Genuine Oliver Plows and Repairs is at HENING & NUCKOLS.



ROSS SILO FILLING MACHINERY
With BLOWER and Traveling FEED TABLE

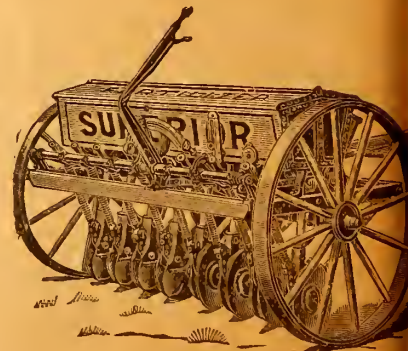
Made in sizes to suit all wants from 5 to 15 Horse Power Engine. Sold on their own merits. Pay for same after tried and satisfied. Write for catalogue. **Largest Capacity and Strongest Built.**

Elk horse and steam power hay balers. Write for catalogue and prices.



BROWN Steel Lever Harrows, Wood Harrows, Case-Ring Bearing Disc Harrows, Spring Tooth Harrows. All sizes, plain or with levers. Acme Harrows of all styles kept in stock at lowest net prices.

We mail our General Catalogue promptly on request.

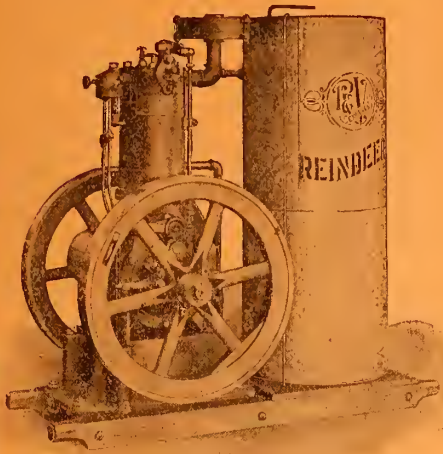


SUPERIOR GRAIN DRILLS.

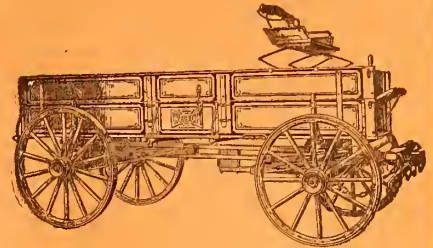
Plain and Fertilizer, Hoe and Disc Drills. All sizes.

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.

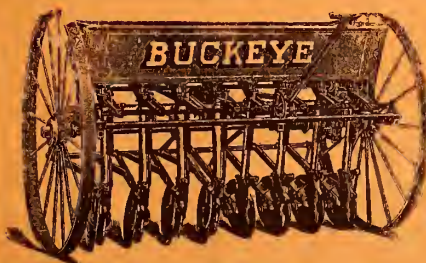
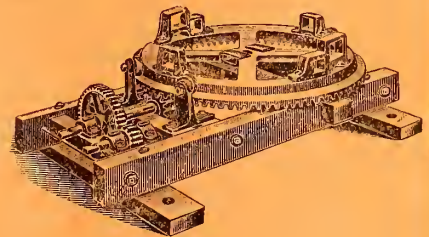


Fish, Moline & Weber 2-Horse
Wagons. Champion & Hickory
1-Horse Wagons.

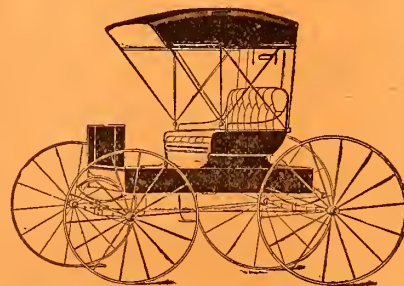
Hocking Valley
Cider Mills
3 Sizes.



Smalley
Horse Powers
for 2, 4 or 6
Horses.



Buckeye
Combined
Grain and
Fertilizer
Drill with
Grass Seed
Attachment.



Columbus
Wrenn, Con-
tinental and
John Deere
Buggies and
Surreys



Success Manure Spreader.



Baling Presses for Hand and Power.

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1426 East Main Street.

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Merchandise from Sheriffs' and Receivers' Sales

30 to 50 Per Cent Saved on Staple Merchandise

OUR WONDERS ARE 908 OFFER

Wrecking prices are known as bargain prices. The most wonderful bargain offering ever advertised. Such an opportunity seldom occurs. The very best manufactured articles are being offered at less than original cost of production. We do not buy our

Chicago House Wrecking Co.

goods in the regular way, but take advantage of various sales to secure bargains. Our mammoth plant is the largest in the world devoted to the sale of general stocks. Over 35 acres literally covered with merchandise.

You Must Buy at These Astonishingly Low Prices. Don't Wait Until it is too Late. Send Us Your Order Today.

JACK-SCREWS, 95c.

Our Jacks are brand new, best quality manufactured. Made with cast iron stand and wrought iron screw having deep cut thread.

10 Ton Jack Screw	\$.95
12 " " "	1.21
16 " " "	1.42
20 " " "	1.90
24 " " "	2.25

House Raising Jacks, each 1.65
Maple Rollers, each .20
Single Tackle Blocks .23
Double " .39
Triple " .53
All kinds House moving equipment



LUMBER! LUMBER!


Send Us Your Lumber Bill For Our Estimate

The Chicago House Wrecking Company offers the most wonderful opportunity ever heard of to furnish you lumber and building supplies of every kind at prices that will save you big money. Such an opportunity as this seldom occurs. We have lumber for your house, church, barn, meeting house, cribs, stores, factories and in fact buildings of every kind. We can furnish absolutely everything required in construction material. Have your carpenter or builder make up a complete list of everything that you may require, including Lumber, Sash, Doors, Nails, Roofing, Siding, Ceiling and every single article. Send it to us at once, tell us where you have seen this advertisement and we will make a proposition that will be a saving of from 30 to 60 per cent. This is not an idle statement. Thousands of satisfied customers have bought lumber from us in the past. We guarantee absolute satisfaction. We require your good will.

Special Furniture Catalog FREE!

We are constantly purchasing at Sheriffs' and Receivers' Sales complete stocks of high grade, brand new, up-to-date Furniture, Carpets, Rugs and Linoleum. We can save you from 30 to 60 per cent. Good Linoleum at 30c per sq. yd. Rugs from \$1.50 up. Bedroom Furniture, Office Fixtures, Store Fixtures, etc. We can furnish everything needed for the home or the office. Send us list of your requirements or ask for our Special Furniture Catalog.

Conductor Pipe, 3 1-2c per ft.




Brand new galvanized. 2 in. per ft. 3 1-2c per ft. 4c. Other sizes in proportion. Eave Trough, per ft. 3c and up. Elbow, Eave Trough Corners, Hangers, Hooks and everything in Down-spouting, Eave Troughs and Fittings. Brand new galvanized Ridge Roll, per ft. 4c and up. Roofer's Snips, 28c each. Roofing tools of all sorts.

PORTABLE FORGE, \$4.75.



Lever motion; with extra heavy pipe legs; stands 30 in. high; 8 in. fan. Larger forges like illustration from \$8.35 to \$14.50. We guarantee our forges equal or superior to anything on the market. Write for our full list. Blacksmiths' sleeve g. 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. Hot and Cold Chisels, 9c per lb.

1-INCH PIPE, Per Foot 3 1-2c.



Overhauled pipe, complete with screwed ends and threaded couplings:

1 1/2 inch	3 1/2c
2 inch	4 1/2c
2 1/2 inch	5 1/2c

Overhauled well casings, with couplings complete, good as new:

1 1/2 inch	6c
2 1/2 inch	10c

FIELD FENCING, 20c per rod.

Galvanized graduated diamond mesh field fencing, 2 in. high, per rod.....20c
36 in., per rod.....35c
Square mesh fencing at the same prices. Heavy 2-in. mesh, hexagon galvanized fencing, suitable for every purpose, made of No. 16 wire, 150 lineal feet 24 in. wide, per bale.....\$2.00
Galvanized poultry netting, 2-in. mesh, 150 lineal feet to the bale; 12 in. wide, per bale.....65c

HORSE SHOES, \$3.75 Per Keg



We offer 2,000 kags of brand new, first class, celebrated "Eagle" horseshoes at.....\$3.75 per keg when ordered in lots of 5 kags at one time; in smaller quantities, Price.....\$4.00. We can furnish sizes from No. 0 to No. 7, either mixed or one kind to a keg.

Guaranteed Paint 85c Gal.



A paint that is a paint. Not the cheap kind. Made of best materials. Ground in pure linseed oil. Every gallon backed by our five year binding guarantee. You run no risk in using our Premier Brand Paints. 1 gal. cans, 98c gal. 5 gal. Bucket, 95c gal. Half hbbl. (25 gal.) 88c gal. Bbls. (50 gal.) 85c gal. Send for free color card and estimate.

ENAMELED KITCHEN SINKS, \$1.00



New best enameled, 16x24 with nickel-plated strainer, enameled inside and outside, price.....\$1.00. Cast-iron flat rim white porcelain enameled kitchen sinks, size 18x30 with nickel-plated strainer.....\$1.75. Handsome high back, one-piece, white enameled cast-iron seamless kitchen sinks.....\$1.10.

ENAMELED TUBS, \$6.00



Brand new steel tubs, with enamel baked on, 5 ft. long. Handsome white enameled, seamless cast-iron, roll rim bath tubs.....\$15.25. Low-down water closet outfits.....\$10.00. Beautiful Marble Washstands.....9.00.

Rubberized - Galvo Roofing, \$1.25 per sq.




Easy to put on. Requires no previous experience. Can be put on over shingles without removing them. Weather-proof and fire-proof. We furnish with each order sufficient cement to make the laps and larra head nails. Price in par sq. of 108 sq. ft. 1 ply, \$1.25. 2 ply, \$1.40. 3 ply, \$1.75.

MANILA ROPE BARGAINS.



Good Manila Rope, slightly used, all sizes, 2 1/2 in. per 100 ft., \$3.25. New Manila Rope slightly shop worn, per lb., 10c. Wrapping Twine, per lb., 5c. Galvanized Galv Wire 100 ft. Bra Rope and Cables at waydowu prices. Tackle Blocks, etc.

WIND MILL LIFT PUMPS



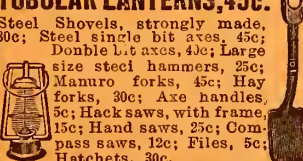
Double acting, 3-way pumps.....\$6.20
Hand-force pumps.....3.95
Siphon spout-lift pumps.....3.65
Kitchen force pumps.....3.25
Pitcher spout pumps.....1.65
Perfection spray pumps, best manufactured.....2.25
Pumps of all kinds.

GALV. STEEL TANKS, \$2.00



Weigh less and twice as practical as wooden tanks; best manufactured. 32 gal. tank, \$2.47 gal. \$2.50, 73 gal., \$2.75. 90 gal., \$3.50. In sizes in proportion. Feed Cookers, \$9.20. Steel Wagon Tanks \$7.00. Galv. Troughs 60c.

TUBULAR LANTERNS, 45c.



Steel Shovels, strongly made, 30c; Steel single bit axes, 45c; Double bit axes, 40c; Large size steel hammers, 25c; Manuro forks, 45c; Hay forks, 30c; Axe handles, 5c; Hack saws, with frame, 15c; Hand saws, 25c; Compass saws, 12c; Files, 5c; Hatchets, 30c.

100 Lbs. FENCING WIRE \$1.25



No. 14 Painted Wire shorts.....\$1.25
Nos. 9, 10, 11 and 12 Galvanized shorts, \$1.80
Nos. 14 and 15.....\$1.90
Galvanized Wire continuous lengths. No one 100 lbs.....\$2.00
No. 7.....\$1.80
BB Phone wire No. 12 per 100 lbs.....\$2.85
No. 14.....\$3.10
Telephone equipment, Fence wire all kinds.

DOORS, 60c and up.



10,000 doors and windows, which we will close out at a saving of 40%. At 60 cents we can furnish you an ordinary door, good enough for general purposes. We have a complete list of these doors and windows, which we will mail on application.

Wrought Iron Bolts, per lb. 4c



Bought at manufacturers sale, 10 car loads of high grade carriage and machina bolts, and all kinds together, excellent assortment, strictly first class. In lots of 100 lbs. per lb., 4c. Also carriage and machina bolts; Wood screws.....10c per lb.

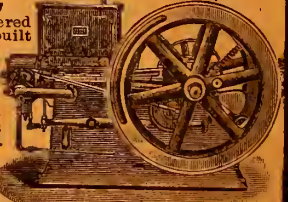
Steel Roofing Per 100 Sq. Ft. \$1.50



Most economical and durable roof covering known. Easy to put on; requires no tools but a hatchet or a hammer. With ordinary care will last many years. Thousands of satisfied customers everywhere have proven its virtues. Suitable for covering buildings of any kind. Also used for ceiling and siding. Fire-proof and water-proof. Cheaper and more lasting than shingles. Will not rot and does not absorb moisture. Suitable for rain-water. Makes your building cooler in summer and warmer in winter. Absolutely perfect, brand new, straight from the factory. \$1.50 is our price for our No. 15 grade of Flat Semi-Hardened steel roofing and siding, each sheet 24 in. wide and 24 in. long. Our price on the corrugated, like illustration, sheets 25 in. wide and 24 in. long, \$1.75. At 25 cents per square additional we will furnish sheets 8 and 8 feet long. Our price on Standing Seam or "V" Crimped Roofing is the same as on the corrugated. We have other grades of Steel and Iron Roofing. Don't Delay. Write TODAY for Full Particulars.

We Pay the Freight to all points East of Colorado except Oklahoma, Texas and Indian Territory. Quotations to other points on application. This freight prepaid proposition only refers to the steel roofing offered in this advertisement. Satisfaction guaranteed or money refunded. We will send this roofing to anyone answering this advertisement. C. O. D., with privilege of examination if you will send 25 per cent of the amount you order in cash; balance to be paid after material reaches your station. If not found as represented, refuse the shipment and we will cheerfully refund your deposit. All kinds of moving apparatus, including rollers, rollers, eave trough, steel snips, fittings, etc. Send us your order today.

\$140 Buys America's Finest Built Gasoline Engine.



Sold under Binding Guarantee.

The best farm Engine manufactured is offered you at a price within the reach of all. It is built for service and satisfaction. It is not a toy engine, but made along lines that will be appreciated as time goes by. It is rated conservatively by the manufacturers at 5 H. P. but it will easily develop 6 H. P. It has the most perfect construction possible. The cooling tanks is placed on top of cylinder, less water being thus required in cold weather. No danger of freezing in winter time. The gasoline supply tank is cast in the base. No necessity for any pipe. No danger of leakage. All castings are made of a special mixture of iron, giving great strength and no danger of breakage. The connecting rod and crank shaft are steel dropped forgings, made of finest of mild steel. Both the crank and wrist pin brasses are adjustable. Here you have an Engine, built on the most improved up-to-date design, along lines giving great strength, durability and simplicity of operation. No need to be a mechanic in order to understand working this Engine. Our complete instructions cover every possible contrivance. This Engine will pay for itself in a year's time. It can be used for any general farm purposes, as well as for regular machine shop uses. It is alive to modern ideas. A few cents per hour will cover all cost of operation. When the Engine is idle, no expense. Can be started and stopped instantly. Absolutely the Easiest Started Engine Manufactured.

We furnish the outfit complete with magneto dynamo and set of four dry batteries. We furnish a set of batteries for starting Engine. When Engine is started, use the magneto. Shipped complete with all necessary oil cups, lubricator and muffler, all ready to run. Send in your order today.

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THIS WONDERFUL BARGAIN BOOK is just out and ready to be sent to you at once. It is a book such as every shrewd buyer must have. 500 pages with thousands of items of the very best merchandise and supplies bought by us at Sheriffs' and Receivers' Sales. It will pay you to keep it handy. Its pages contain a full record of what we still have on hand from the wonderful St. Louis World's Fair. Merchandise, machinery, and supplies, articles for everyone. You will find it useful in the home, in the field, in the workshop or in the office. Write us today.

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