Southern Planter

A MONTHLY JOURNAL

DEVOTED TO

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

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The Southern Planter.

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

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

69th Year.

RICHMOND, VA., DECEMBER, 1908.

No. 12.

OUR SUBSCRIPTION CAMPAIGN.

The Subscription Campaign which we launched last | every person who will remit \$1.00 for a copy of this book. month is getting along very nicely indeed. At the outset we wish to thank our numerous friends and subscribers for taking hold and making our Journal known to their friends. We simply wish to repeat some of the liberal offers we are making and feel sure that there is not a farmer in the South who cannot avail himself of at least one of them to his own profit. The Southe-Planter should have 100,000 subscribers in the South Atlantic States. Even if every one had to pay fifty cents per year for it we cannot see how they could fail to get their money's worth. Next year we are going to celebrate our seventieth anniversary and want to do something special for our readers and, naturally, want to reach as many farmers as we can. Look in the advertising section for the page of liberal offers and read the same as a sample of what we are willing to do at our end of the line:

In addition to these arrangements we have now on the press a book on poultry keeping, "The Southern Poultry Guide," written by our staff poultry correspondent, Mr. Cal Husselman. This book will be off the press this month, and it is, without any exception, the most practical book ever published on the subject. The price of the book (150 pages, with numerous illustrations) will be \$1.00. We are going to give The Planter free to the advertisement for other liberal offers.

We have also had Prof. W. F. Massey to write us a booklet of over sixty pages, called "Monthly Hints for Farm, Orchard and Garden," for every month in the year. This is as full of valuable information for every farmer and trucker in a crisp and concrete form as an egg is of meat, and written in Mr. Massey's well-known, practical style and based on his own personal experience. The book is just off the press this month and will be sold at fifty cents. We are going to give this booklet free to each subscriber or person who will send fifty cents for his subscription.

We have also secured a supply of a new Farmers' Account Book, which is the simplest book of this kind we have ever seen. We will give a copy of this book to each subscriber who pays \$1.00 for a three years' subscription to The Planter and sends ten cents to cover postage.

We will send any edition of any of the Richmond city papers with The Southern Planter for one year to any subscriber who pays the price of the city paper alone. These prices will be found in our Clubbing List.

We will supply any standard \$1.00 magazine with The Southern Planter for one year each for \$1.25. Look up

OUR JANUARY, 1909, ISSUE WILL BE OUR USUA L HOLIDAY NUMBER, FINELY ILLUSTRATED, WORTH ALONE THE PRICE OF THE JOURNAL FOR THE WHOLE YEAR. THOSE WHO WANT TO BE CERTAIN TO GET THIS MUST BE ON OUR LIST AS SUBSCRIBERS BEFORE THE END OF DECEMBER. SUBSCRIBE AT ONCE.

Farm Management.

WORK FOR THE MONTH.

At the close of another year, with all the crops harvested and with a fine fall giving opportunity for the seeding of another wheat crop, farmers in the South have cause to be thankful for the rewards which have fallen to their lot for their labors. With the exception of the wheat crop, which has fallen somewhat below the yield of previous years, all crops have given increased yield per acre, and the aggregate production is considerably in excess of the average for the past ten years. Fortun ately for us, the drouth which visited the Northern and most of the middle and Western States, and which caused much damage and loss to the crops, did not trouble us, and to this cause must be attributed somewhat of the success we have attained. But the great factor which has operated in our favor is the much better system of farming which now prevails so generally throughout this section. The old one-crop system of "planting" is giving place rapidly to "farming" with a rotation of crops and the growing of legumes, especially crimson clover and cowpeas, to supply humus to the soil, and the much greater prevalence of the keeping of live stock to consume the fodder and forage crops. These with better preparation of the land before planting and more careful cultivation of the crops, are now beginning to show their effects and, if persisted in, must soon place the South in that lead over other sections which our climatic conditions give us the right to expect. It is rarely that we suffer from drouth in the Atlantic Coast States, and our winters are so mild, as a rule, that winter killing is reduced to the minimum, whilst our long crop growing season gives us the opportunity to replant over so long a period that it is rare that it is necessary to miss a crop of some kind on the land. As an instance of our possibilities in this respect, it has this year been demonstrated by Messrs, T. W. Wood & Sons, Seedsmen, of this city on their seed trial farm that two crops of oats can be grown in one year on the same piece of land and both fully mature and make a good yield. Our Western and Northern competitors will have to make extraordinary large yields to compete with us when our lands are properly farmed and advantage taken of our possibilities. It is true that we are yet a long way from making the yields per acre of wheat, oats and corn that we ought to make but each year shows an advance and all that is needed is persistence in the adoption of good systems of rotation adapted to the section, the use of the legumes, and better preparation of the land, and the use of lime and fertilizers adapted to the needs of the crops and land to be planted, instead of the buying of ready-made mixtures selling upon a name instead of upon a guaranteed analysis proportioned to the requirements of the land and crops. Our farmers are gradually getting out of the way of relying upon a name and are insisting upon the quality of the goods and their adaptability to the land and crop. The gospel of good farming is beginning to have its effect and science to have its influence.

The average yield per acre of wheat this year in Maryland is sixteen bushels in Virginia, eleven bushels in North Carolina, ten bushels in South Carolina, and ten bushels in Tennessee. These figures compare with a sixyear average of fifteen, ten, seven, seven and nine bushels respectively. The average yield of corn in Maryland this year is thirty-six bushels per acre, in Virginia twenty-six bushels, in North Carolina eighteen bushels, in South Carolina fourteen bushels, and in Tennessee twenty-four bushels. These figures compare with ten year averages of thirty-two, twenty-two, fourteen, ten, and twelve bushels, respectively. This, in the aggregate, means a great increase in the production. The oat crop also shows an increase in yield in each of the States named.

The total production of corn is now estimated at 2,642,-687,000 bushels and compares with 2,592,320,000 bushels in 1907 and 2,827,416,000 bushels in 1906. Whilst, therefore, we have a little more corn produced this year than last, which at one time did not appear to be at all likely, and would not have occurred but for the exceptionally fine fall which permitted the maturing of late crops there is to be set against this small increase the fact that the quantity of corn left over from last year is very much less than was the case a year ago. Then we had a surplus left over of 130,995,000 bushels whilst this year we have only 71,124,000 bushels surplus. In the face of these figures it does not seem likely that corn will fall in price. Oats also, though a somewhat larger crop than last year, show a great falling off from the yield of 1906 and also a large reduction in the surplus and are not likely to see lower prices.

Tobacco shows in the aggregate a reduction of about 70,000,000 pounds, accounted for by the decrease in the Kentucky -crop. In Virginia the crop is estimated at 93,543,000 pounds against 74,556,000 pounds in 1907. In North Carolina the production is 117,870,000 pounds as against 100,875,000 pounds in 1907. The average yield per acre in Virginia is 815 pounds as against 760 pounds in 1907. In North Carolina the yield is 670 pounds as against 625 pounds in 1907. The quality in both States is much in advance of that of 1907, and the crop is selling at higher prices and will bring the growers much more money.

The cotton crop is not likely to be any larger, if as large, as that of a year ago, but is being much more rapidly ginned and gotten ready for market. Up to the first of November over 8,000,000 bales had been ginned as against only 6,000,000 bales a year ago. If this means the immediate sale of a similarly larger proportion of the crop the price is not likely to advance, as consumption is not now so active as it was a year ago. It will depend largely on the ability of the cotton producers to hold the crop as to the price to be realized.

Beef, mutton, hog meat, butter, poultry and eggs all

still keep at good prices, indeed, are selling to-day higher than a year ago, and, with the revival in trade conditions which has set in since the electon of Mr. Taft to the presidency the indications are for an advance rather than a reduction. We are of opinion that all meat products are likely to see higher prices on account of the scarcity of stock. During the drouth in the middle and Western States, farmers rushed stock on to the markets as they could see no prospects of feed for them for the winter and there is now no large surplus supply to draw from, and this must have its effect on the markets. Whenever feed is abundant we are of opinion that it will pay to feed it to good stock even though corn is selling on the market at much beyond the average price. We have had abundant crops of forage and fodder and these have mostly been well saved. If now they are utilized as they ought to be they should be a source of profit to the producers and be the means of greatly enhancing the fertility of the land.

The labor difficulty has this year been one of less importance than for several years past. The effect of the money panic of 1907 was to cause almost a complete cessation of new development work and the building and improvement of railroads and other public works. Thousands of hands were discharged and many of these found their way back to the farms and were willing to work for wages which farmers could afford to pay, and thus relieved the situation. The true remedy, however, for scarcity of labor on the farm is the substitution of machinery, and this has made great progress in the South. Human labor is too costly to be used even at low wages, and farmers who have substituted machinery wherever it can be used have realized this and can get along and do more work with less than half the labor formerly required. These men are not likely to go back to the old days of the single plow with one or two hands and light teams, however low may be the wages. The tendency every day is to increase the power and strength of the machines used and to use horse, mule and steam or kerosene power to operate them. We are looking forward to the time when much of the horse power now required on the farm will be dispensed with and engine power be substituted. A great saving will result from this change as the engine only consumes when working, while horses and mules have to be fed at all times. In Europe this change is being largely made already and it will soon come about here. We plowed with steam more than forty years ago and in many sections of England to-day the travelling steam plow and cultivator is as common as the steam threshing outfit. Owners of threshing outfits also operate steam plows and, after finishing up the threshing, set out with the steam plow and plow and fit the land for seeding at so much per acre. The co-operative ownership of these outfits by a number of farmers in any section would result in great economy in production and would make farmers largely independent of labor difficulties. Until this change comes about we would urge that farmers as they need new implements buy only the ones capable of doing the work of two or three of the old ones and operate these with heavier teams and

or three men working with teams of ten or twelve horses and with some machines, such as reapers and threshers with teams of twenty horses, and doing the work which here in the South is done by more than three times as many men. There you will find the whole work of seeding a crop of grain completed at one operation and with one team. The plow has hitched behind it the harrow or cultivator and the roller and behind this follows the drill, and thus at one crossing of the field the land is prepared and the crop put in. We have got to come to this, and the sooner we make the start the greater will be the gain. The beginning of another crop year is the time to give this question consideration and this is our reason for introducing the subject at this time. The two great problems confronting the farmers of this country now are how to produce crops sufficiently large to meet the requirements of a population now rapidly growing up to the 100,000,000 mark and to improve at the same time the fertility and crop producing capacity of the land. In the solution of these problems machinery is to play the most important part and hence the necessity for its consideration. Greater crops cannot be made without better preparation of the land and this cannot be made without better and heavier implements except at a labor cost which will be relatively too large. .

It is too late now to plant any further crops this year except it may be Canada peas and oats in the Tidewater section of this State and the Eastern sections of North and South Carolina, and even in these sections the seeding of this crop at this time is only justified by the consideration that the work is gotten out of the way of other pressing work in the early spring months. Seeded now, the crop will be no earlier than if seeded in January or February unless the winter should be very mild, and if it should be severe the risk of injury will be considerable. The crop is valuable as an early grazing crop for hogs and for green feed for stock and for an early hay crop and it comes off early enough to be followed by corn or some other forage crop. Sow two bushels of peas and cover deeply, say five or six inches, and then sow one bushel of oats and cover three or four inches.

Though too late to sow any crop, it is not too early to begin to get the land ready for crops. One of the greatest faults of Southern farmers is that they fail to make use of the fine open winter weather which we have. They argue that because we have not generally any severe frost that plowing the land in winter does not effect any good purpose. This is wholly wrong. Whilst we may not have the severe frost which the Northern farmer gets, we yet have sufficient frost to greatly ameliorate land open to its influence, and another great purpose served is that by winter plowing we break the land and make it permeable by the rain and thus prevent washing and admit the air and sun into it. Land plowed now may require to be replowed later though more frequently, if the plowing be done deeply now, and especially if it be also subsoiled, this further breaking may be well done by the disc or cutaway harrow. But even if it be necessary to replow it this is not to be regretted, thus economize on man power. In the West we find two as what all our land most needs to make it more productive is more frequent plowing and breaking of the soil to thoroughly disintegrate it and admit the air, the sun, and the water into it.

The following extracts from a Bulletin issued by Dr. Knapp, the Special Agent in charge of the Farmers' Co-operative Demonstration Work, on this subject of fall and winter plowing, are so pertinent and so full of sound wisdom that we make no excuse for republishing them. They ought to be read and re-read and pondered by every farmer and acted upon:

The presence of heat, air, and moisture is essential to chemical and germ action in the preparation of plant food in the soil. The depths to which these penetrate the soil depend upon the depth of the plowing, provided the soil is well drained. There is no use in plowing down into a subsoil full of water. * * * It has been proved beyond question that the roots of plants penetrate the soil deeper and feed deeper in deeply plowed land. Thus, in general, it may be stated that when the soil is plowed three inches deep the plants have three inches of food; when plowed six inches deep, they have six inches of food, and when plowed ten inches deep they have ten inches of food. The fact that the bottom portions of the plowed land are not as rich in available plant food as the top portions shows the necessity of getting more air and heat down to them by deeper tillage. * * * * The most essential condition for fertile soil is a constant supply of moisture, so that a film of water can envelop the soil particles and absorb nutritive elements. The hair roots of plants drink this for nourishment. If there is any more than enough to serve as films for the soil particles and capillary matter, there is too much and it should be drained off. This can be determined by digging a hole twenty inches deep. If there is standing water in the bottom of the hole, it indicates too much water in the soil or subsoil. * * * * The capacity of a given soil to hold film and capillary moisture depends upon how finely it is pulverized and upon the amount of humus in it. Unplowed lands retain but little water. Thoroughly pulverized soil three inches deep cannot store enough to make a crop. * * * * In all Southern States there are every year periods of drought, sometimes not serious but generally sufficiently protracted to reduce the crop The remedy for this is increased storage capacity for moisture. This can be accomplished by deep and thorough tillage and by filling the soil with humus (partly decayed vegetation). The effect of deep tillage has been explained. The effect of humus is to greatly increase the storage capacity of soils for water and to reduce evaporation. A pound of humus will store seven and one-half times as much moisture as a pound of sand, and the sand will lose its water by evaporation three and one-half times more rapidly than the humus. A clay soil will store only about one-fourth as much moisture as humus, and will lose it by evaporation twice as rapidly. * * * * Plants use an enormous quantity of water. An acre of good corn will absorb and evaporate during its growth nearly ten inches of water. About three-fourths of this amount will be required during the last seventy-five days of its growth, or at the rate of two and two-fifths inches of water a month. This is in addition to evaporation from the soil, which, even with the retarding influence of a land. When this water is drained out that falling on

dust mulch, will amount to several inches each month in midsummer. * * * * An objection is sometimes urged that fall-plowed soil becomes saturated with water during the winter and remains wetter and colder later in the spring than land left unbroken in the fall. This is true only upon land not sufficiently drained and where the breaking is shallow. Water passes through deep breaking readily, and, with reasonable drainage, it is ready for planting earlier than lands broken in the spring. * * * * When land is nearly level and drainage poor, the soil should not be flat-broken, but be left in ridges or narrow lands about five or six feet wide, suitable for planting with a dead furrow between. This provides winter drainage and keeps the pulverized soil out of the water, which is important even if unbroken, * * * * A deeper and more thoroughly pulverized seed bed was the foundation upon which England built an improved agriculture, and this principle has been generally accepted there for more than one hundred and sixty years, until the average production has increased nearly fivefold. * * * * * Do not bring to the surface too much of the subsoil. The best plan is to double plow; that is, to follow the breaking plow in the same furrow with a subsoil plow or narrower plow or a scooter (with sides removed) and go down as deeply as desired. Generally the disc plow may be sent down eight or ten inches with impunity if the plowing is done in the fall, and especially if the land is plowed twice or more. * * * * There is no question that breaking and pulverizing to a depth of eight to ten or twelve inches is economical. The cost of breaking ten inches deep, when done with a disc plow, should not be more than fifty cents an acre in excess of breaking six inches deep. Whether a plant has plenty of food all the time or only part of the time makes the difference between a good crop and a poor crop.

Turn down all the vegetable matter upon the land to make humus. Do not plow when the land is too wet to work well.

Land needing draining should have attention during the winter months. Very much of the land in the South would be greatly improved in productiveness by the lowering of the natural water level. This is too near the surface on most of our best lands to permit them to make the yields they are capable of. Because water does not stand on the surface constantly is not an indication that land does not need drainage. Wherever water stands in a hole dug twelve or eighteen inches deep that land needs draining. Plants cannot grow in water sogged land and it is the underlying water that does the injury, not that falling on the surface and merely standing for a few days. Get the underlying water off so as to increase the depth of the soil in which the air can circulate and then crops will have a chance to succeed whether the season be a wet or a dry one. Drains should be put down from thirty to thirty-six inches deep and should be filled up not with loose rocks or trash but with the stiffest soil dug out of them. This will cause the drains to draw the water from the adjoining land on either side of the drain and thus do full service. A drain filled with rocks and loose trash will simply carry off the water falling upon its course and will not suck it out of the adjoining the surface all over the field will soon find its way down to the depth of the drains and will do no harm. The greatest difficulty experienced in draining land in this State is the absence of tile works which makes the tile cost too much money, as they have to be brought from the North or West. It would pay farmers in every section of the State to establish cooperative tile works for supplying themselves with the tiles needed. Drainage should be done at a cost of from \$15.00 to \$20.00 per acre at the outside and the increased productiveness of the land would in a few years repay this many times over. We have drained scores of acres of land and therefore know from practical experience the truth of what we say.

The work of cleaning up land intended to be brought into crops and cultivation ought to have attention. Do this work thoroughly. Don't leave rocks or stumps to interfere with plowing a straight furrow from one side of the field to the other. Left in the ground, these obstructions cause broken implements, waste of land, loss or temper and harbor briars, weeds, insects and fungoid diseases. Clean them out as they are met with.

Digout and haul off onto the roads through the farm all rocks interfering with the cultivation of the land and gather the loose rocks from the fields and haul these on to the roads and fill up all deep holes with them and cover with gravel, first. breaking the stones into small pieces so that they will set. Fill up the ruts by pulling in the sides and bring the surface of the road into good shape. highest in the center and lowest at the sides, and plow out the ditches on each side to ensure good drainage and thus make a road which will be permanent and dry.

Old fences should be repaired and new ones be fixed where needed, but do not multiply them unnecessarily, as they are a constant source of expense, and should only be put up when absolutely necessary to the effective working of the farm on a good system of rotation. Make all fences straight and in parallel lines as far as possible, to economise time in working the land. Put gates into every fence to admit of access to the fields, and to ensure stock being kept where placed.

Clean out the ice pond, and get it filled with pure clean water, ready for the first frost. Clean out the icehouse and repair it, ready for use. If you have no icehouse, now is the time to build one. The best ice-house is one built above ground, and is practically nothing more than one house within another one, with a space between the walls of the two houses of eighteen inches or two feet, which must be packed tight with sawdust. The natural ground makes as good a floor as any, and should have logs laid on it, with open spaces between them to keep the ice out of water draining from the ice. This water should all fall to one point, from which it should be carried off by a drain, which drain should be trapped with a bent pipe, which will stand full of water to exclude inflowing air. A double roof should be placed on the house, with a good air space between the inner and outer roofs, and plenty of ventilation should be provided to carry off all warm air.

Have all fodder and forage crops not already stored under cover or stacked at once hauled out of the fields and placed in the barn, or in stacks over which a good roof should be fixed, and let these be located near the barn for handiness in feeding.

Fix everything tidily and snugly about the farm buildings and home, and make good footpaths from the house to the farm buildings, wood-house and other conveniences, so that in bad weather the necessary work may be attended to without wading through mud, slush and snow.

A Merry Christmas and Happy and Prosperous New Year to All.

THE PROBLEM OF FERTILITY IN EASTERN VIRGINIA.

Editor Southern Planter:

Some writers tell us there is enough potash and phosphate in the subsoil to last hundreds of years, and that it is only necessary to use long tap-rooted plants, such as peas and clover to bring this up, and add humus; others tell us that potash and phosphate must be used, or the land will get too poor to sprout peas.

Now, which side is right? With the price of the ingredients now almost prohibitive, what will it be when everybody begins using them? Besides, will the mines hold out much longer? If farmers have to depend on these ingredients, their future is a gloomy one. I have several times used a mixture of potash and phosphate on peas on light land, but saw no benefit, the fertilized and unfertilized bringing a fair crop.

Manure made from pea hay will not begin to cover the land from which it was taken. The cattle will drop much in places where it will do no good.

Much land in Eastern Virginia was never rich. You may make a clearing in the woods, and it will produce but a very little better than an old cultivated field. All the discussions in the farm papers seem to apply solely to stiff clay lands. Much land is in as good a mechanical condition after it is harrowed once as it would be if gone over a hundred times, still it produces poorly.

H. T. FAUNT LE ROY.

New Kent Co., Va.

All the heavy lands and nearly all the light lands on a clay subsoil have both potash and phosphoric acid sufficient in them to produce good crops for hundreds of years, if only the same was in an available condition, but largely these are unavailable, and must remain so until released by deepening and cultivation of the soil, and the introduction of a regular course of rotation of crops. A prime requisite for all the lands of Eastern Virginia is humus in the soil. Long cultivation in clean hoed crops has consumed all the vegetable matter in the soil, and without the presence of this in abundance, the potash and phosphoric acid will not become available. Humic acid, the produce of decaying vegetable matter in the soil, is essential to dissolve out and make available the phosphoric acid and potash. The surface soil in these sections-and this is largely true all through the Southhas been so robbed of its vegetable matter and mineral plant food by a long system of poor farming, that it

must have some help to get it started in the production of this vegetable matter; hence, the advice to apply acid phosphate and potash to give the needed help. The proper crops to use for supplying the vegetable matter are the legumes, cow peas, soy beans and crimson clover, as these crops, when they have the needed mineral plant food (phosphoric acid and potash) can get the nitrogen from the atmosphere, and thus avoid the necessity for buying the costliest form of plant food-nitrogen. It is impossible to secure a heavy growth of any of these legumes on the lands of Eastern Virginia without the use of these minerals, and until a heavy growth has been secured and turned into the land, the unavailable fertility cannot be utilized. We have never known the production of these crops and their return to the soil for a year or two to fail to make these lands productive, so that with the adoption of a proper system of rotation following profitable crops of other kinds could not be made. The lack of available phosphoric acid in all the old cultivated soils of the East, is next to the lack of humus, probably the most important factor requiring attention, and it is well that this is so as this can be supplied at the least cost of any plant food. It is stating the point extravagantly to say the price of these mineral plant foods is nearly prohibitive of their use. Acid phosphate, in which the phosphoric acid is at once available, can be bought at from \$10.00 to \$15.00 per ton, according to the amount of available acid present, and the application of 300 pounds to the acre, costing from \$1.50 to \$2.00, cannot, surely, be considered a prohibitive price to ensure a heavy growth of a legume crop, which will make from two to three tons of hay of the most valuable feeding quality, if cut off, and yet leave from seventy-five to 100 pounds of nitrogen added to the soil for the production of the next crop, and which, if properly balanced by the addition of the necessary amount of phosphoric acid and potash, will make a profitable crop of a non-legume; or, if a legume is again sown, a much heavier crop than the one removed. When once the land is supplied with humus and nitrogen by the growth of legumes, the staple crops can be produced profitably with phosphoric acid alone, as has been demonstrated in all that section of the State, and especially by Dr. Stubbs, in Gloucester county. Our correspondent should read the article from the pen of Dr. Stubbs, published in our October issue, and follow his advice and practice, and he will soon see that Eastern Virginia lands can be made productive at comparatively The need of applying potash is doubtful, small cost. even on the sandy land, except for the production of tobacco and Irish potatoes. Dr. Stubbs finds it unnecessary in Gloucester county, and we have the same report from other counties in that section. The use of lime at the rate of one ton to the acre will, in nearly all cases, suffice to set free sufficient potash to supply the needs of the staple crops, and this can be had at from \$3.00 to \$5.00 per acre, and only needs to be used once in every three or four years; thus, practically only costing about \$1.00 per acre per year, surely not a prohibitive price for this valuable ameliorative of the condition of the soil, for lime acts not merely as a releaser of potash, but on these light lands as a binder of the soil, making it more cohesive and retentive of moisture. Our friend need

be under no apprehension as to the failure of the phosphate mines for years to come. There are millions of tons of phosphate rock in Florida and Tennessee already known and worked, and in all probability, there are deposits elsewhere not yet exploited. For potash we are as yet dependent on the great mines of Germany, which are apparently inexhaustible, and it may yet be found that we have similar deposits in this country. Where potash is needed to be supplied it can be bought at about the same price per unit as phosphoric acid, and therefore, is a cheap fertilizer, seeing that only a small quantity is needed per acre: say, from fifty to 100 pounds for the staple crops. Our correspondent is a pessimist like, sadly, too many of our farmers. He and they need to become optimists. If they will only do their share of the work with intelligence, Providence will give the reward. Hitherto they have largely violated the laws of nature by taking everything and giving back nothing. Plow deep in the fall and winter, and a little deeper every year in the spring; grow the legumes both winter and summer; feed these with phosphoric acid, and then feed them to the land either as vegetable matter turned down; or, better, through the medium of live stock as manure, carefully saved under cover, and applied at once to the land, and adopt and follow closely a rotation of crops, which shall bring at least one legume crop on to the land-and it is easy enough in our climate to bring twoeach year between each staple crop removed, and in five years' time there is not an acre of land in Eastern Virginia which cannot be made to produce profitable crops, unless it is in need of drainage to lower the natural water level. Crops and stagnant water cannot coexist.-Ed.

THOUGHTS SUGGESTED BY THE NOVEMBER ISSUE. Editor Southern Planter:

I was much interested in Mr. Grizzard's views on the cultivation of corn in Southampton county, Va., and am glad to see him courageously standing for a practice which has proved successful in spite of the contrary advice of the experiment stations. Both he and the editor are absolutely correct in everything they say; he in his practice and Mr. Jackson in his principles of agriculture. Mr. Grizzard says that plowing dirt to corn insures a larger yield, and the editor says it exposes twice as much surface to the action of the sun's rays, thereby leading to a more rapid evaporation. Now, it has so happened that I have seen both sides of the picture, for I was born and raised on the north shore of Long Island, a terminal morain formed by a glacier which rested in the valley of the Connecticut River several years before Adam, and which, upon coming in contact with the main waters of the Atlantic Ocean melted, and made the deposit which is now selling for \$1,000 an acre. The north shore of the island is a succession of sand hills, with gravel beds and boulders interspersed here and there, and there is no soil other than sand, and vegetable mould, and no regular subsoil whatever, except the same sand and gravel down as far as you can go.

As an illustration, I may mention that the well on our place was 106 feet deep, and you could see stars from the

bottom at mid-day. It is on soil of this character that a shallow level cultivation is absolutely essential; in fact, every effort of the agriculturist must be bent toward securing and conserving moisture. A high spot in a field is synonymous with a poor spot, and if there is any undrained basin in a field where water that falls on frozen ground will pond during the winter, that is invariably the richest part of the land. At the age of twenty-four I left this country, and bought a farm in Tidewater Virginia that is nearly square, and has no part excepting the river bank which is twelve inches higher than the average, where a fall of six inches in 100 yards is called a hill, where the average well is eight feet deep, and during most of the year every horse track is a mud hole, and every post hole a very capable well, where a high tide comes within four feet of submerging the whole farm, and where there still remains on the adjoining farms traces of the dikes which, prior to the war, were used as a defence against the invasion of the "gurt tides." may, therefore, fairly say that I have experienced both extremes in the problem of water conservation and water elimination; and, I found not only by observation, but partially by dear bought experience, that the level cultivation of my youth was a sure road to crop failure, and starvation when applied in practice in middle age, and that the problem here was not the conservation of moisture, but its elimination, that crops might suffer here from drouth, but were absolutely destroyed by drowning, that successful agriculture consisted not in saving all the water that fell, but in getting rid of all that the land would not absorb, before it would work an injury, and only saving the balance by cultivation and the forming of the mulch.

It is unquestionably true, as Mr. Jackson has pointed out, that a shallow level cultivation will preserve the moisture, but why recommend it to a man who already has entirely too much moisture now, and who, by plowing his field full of ridges, can expose a larger surface to the sun, and thereby do by aeration what he possibly cannot afford to do by drainage. To sum up the situation: A system that is applicable to a Long Island sand bank will not grow corn on Virginia lowgrounds, and the system which will succeed on Virginia low grounds will destroy the productive capacity of a sand hill 200 feet high. As you leave the lowest of the wet lands and the highest of the dry lands, you will find the methods of culture to vary, and various methods be successful until you meet on the mutual ground, where any method will give a good crop, the one essential thing being to move the soil particles, and destroy the weeds at regular intervals.

Mr. Marsh sounds a warning which may be applicable to Northern New York, but which will be but little heeded in Virginia, at least in Tidewater, for, while we may have occasionally small pieces of land used for trucking which become too rich in nitrogen to produce good crops there is little danger, I am sorry to say, of any one's whole farm getting into that condition. Our people grow grain and hay, the former of which contains large amounts or nitrogen, and apply little of any fertilizer, but phosphoric acid and potash to the soil, they have little to fear from

nitrogen accumulation. Mr. Marsh says the farmers about Ithaca use from 300 to 1,000 pounds of 10.8 goods to the acre. A crop of wheat yielding sixty bushels to the acre would require approximately only 300 pounds of ten per cent. phosphoric acid, provided there was none in the soil, and twenty-four pounds of actual potash, which he would get from 300 pounds of eight per cent. potash would a little more than balance it. It is a sensible combination, and well adapted to the wheat crop, where the natural nitrogen content of the soil is sufficient to grow sixty bushels of wheat per acre, but what in the world they want with 1,000 pounds of such a fertilizer is beyond my comprehension. 1,000 pounds of ten per cent, phosphoric acid would be 100 pounds actual phosphorous, enough to grow 200 bushels of wheat per acre, provided the land could furnish the additional six and eight-tenths pounds needed, together with the necessary nitrogen. Of course, these excessive amounts of fertilizer are more applicable to a corn than to a wheat crop for, while corn and spring wheat have practically the same analysis, so far as phosphoric acid and potash are concerned, one usually expects about twice the yield per acre from corn and 1,000 pounds of 10-8 goods would furnish the mineral constituents for an enormous crop, even were the composition of both corn and fodder dependent upon the chemicals applied, as the following figures will show, potash being the controlling factor:

Analysis of corn—ears and fodder, N., 1.76; Ph. a., .54; Pot., .89. Actual potash in 1,000 pounds of 10-8 goods, 80 lbs. Formula: .89 per cent. X 2,000=17.8; 80 ÷ 17.8=4½ tons per acre, or four and one-half average two-horse loads of unshucked corn, as it is usually hauled to the fodder shredder. It must say that I am afraid it is a larger yield than the average here in the Tidewater section, though it is not impossible on land such as Mr. Marsh describes, that is overdosed with nitrogen from stable manure and supplemented by such heavy applications of mineral fertilizer.

Professor Massey has misrepresented the experiments of Professor Stubbs, at Valley Front, in describing them as conclusive as regards the deficiency of potash in the soil, for it was just the other way about. He demonstrated that he had plenty of potash, but lacked phosphoric acid and nitrogen, the latter of which he purposes to supply with stable manure and legumes, and the former by acid phosphate. I have had the pleasure of visiting Mr. Stubbs at his ancestral home, and have heard him describe the whole procedure to the assembled members of the Farmers' Club, of Gloucester county. He has done a great work there, and the farm which was regarded as synonymous with poverty, due to neglect for a long period after the war, now grows excellent crops and supports a large quantity of live stock. As I understand it, Mr. Stubbs has done this without the purchase of any great quantity of nitrogen, and with practically nothing, but the tolls from his grist mill in the way of auxiliary feeds for the maintenance of live stock and building up of the manure pile. This in itself is a great achievement, and goes to prove that our lands may be made more and more fertile with nothing outside their own resources but phosphoric acid.

than has yet transpired. I have heard it intimated that Valley Front was a losing investment for Professor Stubbs during the years of its incipiency. It should pay its way now, if any farm can,

I can appreciate Mr. Baily's difficulty in turning under foul land with a chilled plow. I used to try do such things myself when I first moved here, but fortunately for my venture, I came here too young for the matter of habit to have any very serious effect upon my comprehension. Of course, I don't know from experience anything about foul land on hillsides; but on my own land I have never seen any growth that could not be handled by a big Champion or Dixie plow, and my choice would depend upon my teams. Neither plow will choke when moving at the required speed, but the Champion is better suited to a fast team than the Dixie, and has the additional advantage of lighter draft. Both plows are designed for the same class of work, the handling of loose land that is more or less matted in patches, and covered with loose trash. The difference is that the Dixie has a more abrupt turn to the mould board, and consequently works at a lower speed. Neither plow is fit to use in sod, and no Southern farm is well equipped without two sets of plows the size and style of which should depend largely upon the team and the tenacity of the soil. I use 1,100-pound horses and a No. 19 Oliver for sod, and a No. 111/2 Champion for all other plowing. The draft is about the same, but the chilled plow cuts a shade the largest furrow, and is the most economical to use wherever it will do good work, but I have no use for one in the garden or in a stalk field.

I am much interested in Professor Soule's diagrams for hog lot rotations, and recommend their careful study. This is a very practical subject, and his illustrations are excellent. Perhaps it appeals to me more than to others because I have been hunting for some cheap method of making pork without recourse to the corn crib ever since I can remember, and have never found any system which exactly fulfilled my requirements.

PERCIVAL HICKS.

Matthews Co., Va.

The comment on Professor Massey's remarks on Dr. Stubbs' article is founded on a mistake made by the printers, and is, therefore, inapplicable. Professor Massey wrote "Phosphoric Acid," and the printer made this "Potash." The mistake was corrected, but the correction was overlooked. Professor Massey calls attention to this in this issue.—Ed.

THOSE LOAFING ACRES.

Editor Southern Planter:

How many loafing acres have you that are not yielding a profit, nor even making taxes and interest?

Every day, as I travel over the country I see fields which are claimed to be worth a hundred dollars per acre. with a swale running across, a couple of stone piles in a corner, or a few scrawny. half dead apple trees scattered over them. These acres are loafing ,and what is worse, not only loafing, but costing the farmer hard-earned money every time he sends a man into the field

to work, as the value of time wasted in turning around such obstructions is very great.

With the heavy machinery in use in modern agriculture, a man must have a clean sweep across the field, it he is to be successful. Often a few dollars would put in an underdrain and transform a worthless swale into fertile land. The same amount would take out the stones or root out the trees. Trees are all right in their place, but their place is near the fence, or in a clump by themselves, not scattered all over an otherwise profitable field.

Often we see several acres of rough land which is not in a shape to be cultivated, loafing in weeds and brush, between live, producing fields, simply because the farmer has not the ambition to fence them in. If such land cannot be put under cultivation with profit, it should be fenced and turned into pasture, or if the farmer wishes to grow trees, let him set out some useful variety; but he must not allow the land to loaf away with his profits, growing weeds, brambles and brush, for though many farmers do not seem to know it, there are just as many weeds in the shape of worthless trees, as in ordinary crops.

Another way in which your acres loaf, is by growing crops in small patches, which can be seen all over the country. Here not only the land loafs, but also the farmer, the hired man and the teams in time spent in turning corners, and wasted in cultivating small patches. In order to succeed with modern heavy machinery, the farmer must be able to cultivate long stretches.

Cut out all parts of your farm that are loafing, and not producing, even if it takes half your farm, and run the rest on a short rotation with clover or other legumes, and you will produce more crops, with one-half the man and team labor.

Another way of allowing your land to loaf, and especially in the older portions of the country, is not to supply sufficient plant food to bring a profitable crop to maturity. The farmer's land is his bank. A part of the plant food is made available each year from nature's inexhaustible supply, the rest must be supplied, and if he takes it out faster than it is renewed, his crops will fail. How sad it is to see a farmer plow, cultivate, sow, harvest and thresh half a crop from a field, when with the same amount of fabor he could have prevented his field from loafing, by supplying the amount of plant food needed to grow a full crop, as is done by successful farmers all over the country.

What to use can only be found out by experience and advice from the experiment stations and practical farmers, but if clover and other legumes are grown, and a large amount of manure made, very little nitrogen will be needed. But it is probable that the mineral plant food will be deficient, especially potash and phosphoric acid, which can be obtained separately as potash salts and acid phosphate, or in mixture, prepared especially for those farmers who rely on atmospheric nitrogen. As a usual thing, however, the latter class of farmers have fewer loafing acres, and they produce maximum crops on clean fields supplied with sufficient potash, phosphoric acid and nitrogen, as shown by carefully conducted tests with the plant food elements. To the farmer with loafing acres 1 can only say: Get rid of loafing acres and other loose ends first, then you will be in a position to emulate the example of the " close to nature farmer."

CORN GROWING AND IMPROVING LAND.

Editor Southern Planter:

In the January number of the Planter of this year i pcticed the demonstrative work being carried on by the farmers in the vicinity of Burkeville, under instructions from Mr. T. O. Sandy. I determined to know how this mode of farming applied to raising corn would do in Southwest Virginia, so decided to try the plan on about five acres on my farm in Carroll county, and the experiment has proved a success, though I did not follow his instructions in full. I did not subsoil, and did not plow the land until early spring, but broke it from six to seven inches deep. I applied lime, one ton to the acre, and harrowed it in; also applied 400 pounds of bone meal on two and a half acres, and acid phosphate, sixteen per cent. on the other half. I find that the corn on which the acid phosphate was applied was the equal, if not better, than where the bone meal was used. In working the crop to followed his instructions as to sowing crimson clover at the last working, and have a nice stand. I do not think our seasons are long enough here to wait for the clover to get in full bloom before turning under, and then make a crop of corn next summer; and, therefore, am at a loss how I shall proceed further. I want to put this land in corn in 1910, and have been thinking that when the clover gets in bloom, which, I suppose, will be about the first of June, that I will cut it down with my disc harrow, and let it remain until it wilts, then turn it under as deep as I can, and in September sow it back in clover, adding about a bushel of rye to the acre, on which I will apply about 400 pounds of acid phosphate to the acre.

Acid phosphate seems to answer the purpose of bone meal with equal, if not better, results for the first crop, but bone meal may be much better and last much longer in the end for future crops. I would like to hear from you about this.

C. L. HANKS.

Carroll Co., Va.

We think you should be able to grow a cowpea crop for hay, following the turning down or cutting in of the crimson clover if you did not wait until the clover is in full bloom, and then follow this crop with crimson clover and grain mixed (wheat, oats and rye in equal part, one bushel to the acre, and twelve or fifteen pounds of crimson clover, with an application of 300 or 400 pounds of acid phosphate per acre). In the event of your adopting this course, we would cut in the crimson clover crop with the disc harrow instead of plowing it down, and drill the peas at the rate of two pecks to the acre, using the grain drill with every other spout stopped. Cut for hay in August or September, and then cut in the stubble and fertilize with the disc harrow, and sow the crimson clover and grain mixture. This would enable you to get a crop of good feed, and yet put the land in better condition for the following corn crop, and this without the cost of

do not turn the furrows completely over, but edge them so as not to destroy the connection of the turned furrow with the subsoil. In this way the capillarity of the soil will be maintained, and the moisture from below will rise in the land and ensure the decay of the clover crop, and provide humus for the next crop. We greatly prefer to grow some crop on the land to utilize the nitrogen gathered by the clover, as there is risk of loss of much of this by leaching if the land be left bare during the summer months. Better grow only half a crop of cowpeas than run this risk. The acid phosphate will give you the phosphoric acid needed just as well as the bone, but it will be more completely used in one crop than would the phosphoric acid in the bone. In acid phosphate the phosphoric acid is immediately available. In bone it is only slowly available, and its benefit will be seen in several crops following the application.-Ed.

COMMENTS ON OCTOBER PLANTER.

Fertilizers.

Editor Southern Planter:

In regard to Mr. Marsh's article on manures in last month's Planter, I would suggest that one has to take into consideration not only the needs of his soil, but the special needs of the various crops. One who studies his soil as Dr. Stubbs has done, may find out that he needs but one of the mineral elements. Dr. Stubbs says that his soil needed phosphoric acid rather than potash, though I was made last month to say that ne found potash the one thing needed. But if Dr. Stubbs was growing tobacco or potatoes it might be that he would find potash needed for these crops. Some of the best and most thoughtful farmers in Eastern North Carolina insist that phosphoric acid does no good on their lands, while potash is needed.

And this is the difficulty with the ready-made fertilizers. Thousands of tobacco growers are using every year the regular 3-8-3 goods for tobacco, not understanding that the percentage of phosphoric acid is entirely too large, while the percentage of potash is too small for their crop, and not stopping to inquire the source of the three per cent. of potash in the article, which is generally from the muriate, and hurtful to tobacco. But so long as farmers buy fertilizer by the brand name, and without any study of the needs of their soils or crops they will go on wasting money in what they need not buy, and depending on fertilizers merely to get more sale crops.

Corn Culture.

Mr. Grizzard would hardly sever a hog's gullet to make him grow, and does he understand that the only part of the root of corn or any plant that is getting food from the soil is the small part out near the end of the root fibers that has root hairs on it, and that when these are cut off the root is perfectly useless to the plant till it can make new fibers and new root hairs? Corn may suffer on flat land that needs drainage when cultivated two plowings. If you do not think you could succeed with level, but the cure is in draining the land. With Mr. the cowpea crop in your section—here we have no diffi- Grizzard's method there is too much human labor involved. culty in doing this-then your plan of plowing down the Farmers complain of the scarcity of labor, and yet put one crimson clover will be all right, except that you should man to one mule, and go several fimes in a row, when one let it get more than wilted, or you may at that season man with two mules to a riding cultivator could do the of the year sour the land. Let it get most of the natural work faster than two men with the plows, and do it betmoisture out of the crop before turning down, and then ter. I have grown corn on as flat land as any in South-

amptou county, and never ridged it up with a plow in mal bred into dairy type is to that extent a poorer beef laying by, and grew heavier crops than my neighbors who did so. In fact, I have made over 100 bushels of corn per acre on land behind a big dyke to keep the salt water off, and I know that deep preparation and shallow cultivation is best even there. Mr. Grizzard says that the earth is thrown up to make a mulch. It is thrown up and dries out, while if it had been left level and the surface scratched, it would have held the moisture for the roots, and the feeding roots down the middles would not have been cut, and the corn starved. He says, make the siding shallow, but break the middles four inches deep. Does he realize that at that time the feeding roots have crossed each others rows, and running deep in the middles is cutting the roots of both rows?

Turning Down Green Crops.

Mr. Bailey wants a plow to turn down green crops. do not, for I would never turn down a green crop in hou weather for a sown crop, because of the serious danger ot souring the soil. The only green crop I would turn under is crimson clover or rye, in the early spring, and for a hoed crop. While the Oliver plow is an excellent one for most purposes, it chokes worse than others in this use, and the Syracuse is much better. I have had little experience with disc plows, but I do not believe they will turn under a good growth. There is in use here for cutting sweet potato vines a revolving disc cutter, right in front of which is an iron bar sloping backwards from the end of the beam to just in front of the disc. This presses the vines down and keeps them from riding up over the cutting disc. With something of this sort on the front of a plow beam I believe we could do away with the chain.

Farm Papers.

Mr. Carlton hits a point that has often occurred to me. How is it that farmers will take farm papers and still follow the old ruts till some one gets them to try a "demonstration." The demonstrations are all right, except that they seem to be demonstrating more how much fertilizer a man can use than anything else. But how is it that a farmer will take a paper and not profit at all by what he reads. That is what has always bothered me. I get letters continually from farmers asking advice about matters that we have discussed over and over again in the papers they take and do not read. There is just the trouble: the paper is taken and thrown aside and rarely read carefully, and suggestions that are made for one man, but which would equally suit another are not seen by the other man till some condition impels him to ask the same question that has already been answered. I thoroughly believe in heavy seeding of grass and clover. My neighbors used to laugh at me for sowing a peck of clover seed per acre, but my clover was always enough heavier than theirs to pay for the difference in seed many times over. Mr. Carlton's nine quarts of grass seed will answer very well where clover is also sown.

Doddies.

I hope that if the Doddies will give an abundance of milk for the calf that Mr. French will let it go at that, and not try to get them into that mythical class called "dual purpose," but raise them for what they are noted, the making of the finest beef in the world? A beef ani-

animal. Doddies often top the beef market, duals never. Salt in Hay.

I am glad that Editor Jackson sits down on the salt-inhay business. I have never been able to understand why people want to put salt on the hay and keep it from drying out. Once when I was busy making ensilage, a farmer came up and said, "Ain't you going to put salt on that stuff", I assured him that I was not. "It will certainly spoil if you don't." When I opened the silo for feeding he came, and was astonished that the green corn had not rotted. Salt would really have done less harm to the silage than to hay. Let the salt-in-hay go with the moon and sign farming.

W. F. MASSEY.

FERTILIZER PROBLEMS.

Editor Southern Planter:

Professor Massey, on page 871 of the October issue, takes me to task for the (according to his dictum) mistake of recommending the purchase of nitrogen.

In order to set myself fairly before your readers I will digress a little, and explain what I am trying to show. The purchase of fertility I regard as a simple business proposition. When fertilizers are high and crop markets low, so that the nitrogen, phosphorous and potassium in a bushel of corn costs more than the bushel of corn will sell for, as has been largely the case for the past few years I have always advised against the application of any fertilizer to the corn crop, but when fertilizers are cheap and corn is high, so that a farmer may buy the nitrogen, phosphorous and potash necessary to produce a bushel of coru, pay the cost of transportation and distribution, and the cost of marketing the additional yield, and still find the price of a bushel of corn in excess of the cost of production, it seems to me good business to increase the yield per acre as far as it can be done, while leaving a margin of profit.

Now, in regard to the purchase of nitrogen, I take a similar view; first, produce all you can at home in manure and by the growth of legumes, then apply so much phosphorous and potassium as is necessary to balance the nitrogen on hand, which will, generally speaking, be very lttle, but as soon as you have reached this point, the purchase of additional phosphorous and potash is absolutely useless, unless you also purchase nitrogen in due proportion, as compared with the mineral elements required by the crop in question.

What I protest against is the heavy application of phosphoric acid far in excess of the possible requirements of the crop. Take the wheat crop, for example. Professor Massey, on page 127, of his invaluable publication "Crop Growing and Crop Feeding," which should be in every farmer's library, says: "An average good crop of wheat of twenty bushels per acre will remove from the soil in the grain alone—and this is all we need be concerned about, since the straw will go back on the land, 28.32 pounds of nitrogen, 10.68 pounds of phosphoric acid, and 7.32 pounds of potash. It will be seen that the relative importance of these food constituents is pretty much as they stand. But so far as nitrogen is corncerned, we will have enough left over in the organic matter of the

clover, and the manure applied to the corn crop in a quantities, that most of the goods are 6-7-5 or 6-7-6 or 7-7-7. three-year rotation to provide all the nitrogen the wheat will need." He then goes on to say that we must supply phosphoric acid enough to balance this nitrogen, and so far, I agree with him; but now, let us see how much it will take. We find that it will come out as follows: $1100 \div .14 = 79$. So, if this acid rock is really an available form of P2O5, seventy-nine pounds of it will produce twenty bushels of wheat per acre, but if, on the con trary the acid rock, after being applied to a soil contain ing lime, and all productive soils contain some lime, reverts to an insoluble form by taking up an extra molecule of lime, and becoming a tri- or tetra-calcium instead of a mono- or di-calcium phosphate, why, then we must apply enough to use up all the available lime in the soil, and still have enough over to furnish the seventynine pounds for our wheat crop; and, right here is my objection to acid phosphate. If we apply it to soil full of lime it tends to revert and become insoluble; and if we apply it to soil containing little lime, it still seeks this base in the soil, and thereby neutralizes the little alkalinity we have.

On our high, well drained lands, acid phosphate is a help in growing clover, but if we apply it year after year to our low grounds in the Tidewater section we will find that it becomes increasingly difficult to get stands of clover, and that finally it refuses to grow unless the land has an application of lime, and that will not always restore its productiveness. So then, I maintain that if acid phosphate is an available source of phosphoric acid on your soil, you are safe in applying seventy-nine pounds per acre for land that with this help, produces twenty bushels of wheat, and that 158 pounds per acre should grow you forty bushels of wheat, and that in all cases where farmers apply 300 and 400 pounds per acre, they are either furnishing more phosphorous than is needed, or the phosphoric acid they apply is seeking bases in the soil that render it insoluble, in either of which cases they are making a mistake, for in the first instance, they had best work for some other source from which to derive their phosphoric acid; and, in the second, they had best stop applying phosphoric acid as soon as that ceases to be the controlling factor in the production of the crop, and apply a fertilizer so composed as to supply whatever is deficient in the soil. And that is the reason that 1 have taken the trouble to compile the figures necessary to get at the exact requirements of crop production according to analysis, and that is why I say that here in the Tidewater section farmers are not generally getting enough nitrogen from the growth of legumes to produce the maximum crops, with nothing but acid phosphate and Kainit, for they generally apply enough to grow them over a hundred bushels of grain per acre, were all they apply available, and were that the controlling factor in the production of the crop.

If my readers will take the trouble to vist the Eastern Shore where over two million dollars a year are paid out in two small counties for the potato crop, and which I regard as by far the most prosperous section of the State. and examine the analysis on the bags of fertilizer at any railroad station, he will find that these people who are practical and successful men are buying nitrogen in large

and that nobody tries to produce any early potatoes without a fertilizer rich in nitrogen, and that the common demand is for 7 per cent. No man is more interested in scientific agriculture than I am, and no one more thoroughly follows out the growth of legumes between each cereal, nor more painstakingly covers with stable manure every acre he ever plants in corn, but I am not so immersed in my theory as to be blind to what is practical, and when I see whole communities buying nitrogen to grow crops and making money in the transaction on one side of the bay, while on the other they are buying practically nothing but acid phosphate and kainit, and neither the farms nor farmers are growing much richer, why I conclude that my theories are wrong and I take a lesson from the practical man who is making a success of his business. PERCIVAL HICKS.

Mathews Co., Va.

THE PLOW PROBLEM.

In our last issue Mr. E. M. Bailey, of Giles county, Va., raised the question as to the best plow to use for doing certain kinds of work. The effect of this has been to bring us letters from a number of subscribers and others on the subject. We herewith present a selection from this correspondence, which we think will be of help in deciding as to the plow or plows to purchase.

Editor Southern Planter:

I see E. M. Bailey, of Giles county, inquires about the best plow to turn under green crops.

I think all farmers are too backward in giving their neighbors the benefit of any information they may have gained by experimental work or otherwise.

I will give, through your paper, my experience with a disc plow. I have turned under rag weed as high as my horses' backs and not one particle of the weed was to be seen behind the plow. I consider it the best plow that I have ever used in fallowing land. The only objection I have to it is that it pulls a team very hard. I also find that the ground is more easily prepared after a disc plow than any other. One man and three good sized horses will do more and better work than two ordinary plowmen.

As Mr. Bailey is from the adjoining county to this one, I should think he could use the disc as well as I do. My land is also very rolling.

I am glad to see the farmers of Virginia taking more interest in better farming. The farmers of this section are just now showing more interest in better farming than I have ever seen, and have at last gotten together and organized a Farmers' Association of Sonthwest Virginia. J. R. K. B.

Pulaski Co., Va.

We commend J. R. K. B.'s remarks as to the duty of every farmer to help his fellow-farmer by giving his experience and the result of his experiments to the attention of our readers. Let us hear from you so that we máy make The Planter a "clearing house" of practical agricultural information. We are glad to know of the organization of the Southwest Virginia farmers. Every

section should follow this example. Organization means mutual help and the greatest good to the members organized.—Ed.

Editor Southern Planter:

I noticed Mr. Bailey's inquiry for a good plow to plow down green crops.

I will give you my experience with the disc plow. It is the plow of all plows for sod land, plowing down pea vines, weeds, corn stalks, broom straw, wire grass, or anything else with ease to the man, or it can be done by a twelve-year-old boy or girl with ease and pleasure. You do not need to roll down anything ahead of it, as the disc plow will do all of that and do it better than anything else. You must not hook a pair of donkeys or goats to it and expect to do good work. It needs a pair of good mules or horses, or three of them, if you want to plow deep and do good work and not strain the horses too much. You can regulate the disc to plow a furrow any width or any depth from one inch to twelve inches.

I was plowing a piece of sod land near the road sometime ago and one of my neighbors came along and stopped me for a talk. I got off my plow and started the mules on. They went to the other end of the land, which was about two hundred yards, and there a man at work turned them in on the other side and started them, and they came back and did as good work as if I had been with them.

The disc plow is the best plow I ever saw to plow new land that is covered with weeds and brush, but it will take a young and active man to do that work, as the disc will throw you as quick as a young mule when it strikes a stump or a root it cannot cut, though I have seen it cut a pine knot three inches through easier than any man could with a sharp axe.

I notice Mr. Bailey said his land was hilly. I think if he will get the Chattanooga Reversible Disc he will do the work to perfection, and he will say as I do, it is the plow of all plows.

W. H. WILSON.

Norfolk Co., Va.

Editor Southern Planter:

In reply to your inquirer, Mr. E. M. Bailey, I will say that I have used one of the Chattanooga Plow Company's disc plows and have found it good for turning under any kind of standing weeds or crop, also, for plowing hard ground. However, if a crop is lodged and matted on the land, this plow will not stay in the ground.

I have used for one season Clark's Cutaway Harrow (double action) shown at top of page 1039 November Planter, and found the device most excellent, but the tool itself of too light construction for use in this section.

Were I to buy another disc plow it would be Clark's Reversible Cutaway, as I am satisfied that the cutaway plow would work as much better than the solid disc plow as the cutaway harrow excells my old style disc harrow.

Tensas Co., La. W. C. VAIL.

Editor Southern Planter:

We notice in the current issue of the Southern Planter an article by one of your subscribers telling his troubles in not being able to cover satisfactorily a rank growth of crimson clover or cowpeas with the ordinary hand plow. Inasmuch as he mentions a Syracuse plow as well as an Oliver as failing to do the work, we feel at liberty to make reply to his article through you.

Before going into the matter in detail, we would say that we have at the present time an expert in the State of Virginia who is on his way still further South. If we can get hold of him in time to have him visit Mr. E. M. Bailey, of Giles county, we believe he can give him considerable information and assistance. If you will kindly furnish us Mr. Bailey's address, we will take steps immediately to have our expert call. Whether or not it results in any business to us, the principle thing is to straighten out the difficulty at that particular point. It is simply along the line we are pursuing of educating farmers whenever the opportunity arises. (We sent Mr. Bailey's address, as requested.—Ed.)

Going back to the subject, we would state that the greatest handicap to good work in the Southern States to-day is the almost universal use of small plows, which are incapable of properly covering the trash where it is very rank. The reason for this is apparent. The more abundant the growth to be covered, the more soil there should be to do it, the width of the furrow being very important. Where there is no attempt to plow wider than eight or nine inches and four or five inches deep, there is not enough soil turned over to cover. With similar difficulties in the North and West to contend with, the trouble is easily overcome by using a plow of sufficient capacity.

Our first and most important recommendation to the Southern farmers is that they use plows of greater capacity. Our second recommendation, which is nearly as important, is that they familiarize themselves with the use of a jointer. This attachment is entirely unknown to probably three-quarters of the Southern farmers, and of the remaining quarter, more than half cannot be made to believe in it. We have seen a plow of proper capacity even used in a field with a very rank growth of weeds without a jointer, which left a fringe of weeds between every furrow, and by the addition of merely a jointer working at the proper depth, every particle of trash was turned under. We do not say that simply a jointer will overcome Mr. Bailey's troubles, but we believe it will be a very great assistance to him in connection with the use of a plow of more capacity. We believe that you can render very valuable assistance to Southern farmers by advocating the use of a jointer at all times.

If Mr. Bailey has no objection to the expense, and is willing to purchase a Sulky plow, we could guarantee to send him one that would do the work desired in a satisfactory manner.

We ourselves make as good a disc sulky plow as there is on the market, but we would not recommend it for the work mentioned. A disc plow can only be satisfactory, in the first place, in ground entirely free from stones of any size. The second condition is that the ground be very hard or be loose and inclined to be sandy. If there is any sod, or the top soil is held together by tenacious roots or weeds, the work done by a disc plow will be entirely unsatisfactory.

To sum up, the disc plow, to do nice work, requires

either unusually hard and dry ground, or loose ground, and in either case free from stones and without a sod covering. The reason that a disc plow will not do nice work in sod ground is that the furrow is cut entirely free, and the rotary motion of the disc gives it an irregular fling. Sometimes the furrow will land in its proper place, but more often it is flung way over on to the unplowed ground, or back on the top of previous furrow. The work of after cultivation when a disc plow is used will be considerable.

The Syracuse Plow Co.

Editor Southern Planter:

I have just read Mr. E. M. Bailey's desire for information as to a good plow to plow under green crops. I'll give him my experience, and I think it worth attention. I use a No. 463 steel beam Syracuse plow, with a B. F. Avery's moon rolling coulter and a chain sufficient long for the work I want done. I use No. 463, the next heavier is better, but 463 is heavy enough for ordinary sized horses for steady plowing. Now, with my outfit, I fear nothing in the shape of pea vines, clover or weeds, no matter how matted, tangled or high, and I'll not choke up once in five hundred yards. I can turn under weeds as high as my horses' backs, but I want the coulter and chain adjusted right. When I get through plowing you cannot tell what was there. Corn stalks go under, too, and you never see or hear from them again. The trouble Mr. Bailey is having will make a man say anything but his prayers, and, to keep in good trim, he would have to go to a revival every ten days. I care no more for pea vines, clover, etc., than I used to for hen weed grass. I wish he could see a field I plowed this year, the first time in seven years (before I came here). The broom sedge was waist high and pines knee high. When I was through harrowing the field looked like it had been prepared for grass. I put this land in peas with acid phosphate, and the crop you ought to see. The moon coulter can be bought in Richmond. L. H. CARLTON.

King and Queen Co., Va.

FARM LABOR IN EASTERN VIRGINIA.

Editor Southern Planter:

It has been said that "the negro farm laborer does not strike for higher wages as imported white laborers would be liable to do." Now, we land owners of Southampton county know from experience that as individuals they make bargains and enter into contracts and yet quit work at will without provocation. Often it is that after having "wintered" upon our farms, when balmy spring weather appears, they disregard their contracts and leave for the mills, factories and railways. We also know that the more wages they get the more bad corn whiskey they are going to drink and the fewer days they are going to work. Often is it the case that our land owners will advance from two to three hundred dollars per year to a ten dollar per month man and receive back only from one to two hundred dollars for the same. The term "tenant" implies that they are working another's land, and the difference in results is small, whether they of the mound.

pay shares or money rent, if the landlord is furnishing all supplies.

With few exceptions, they do not receive from their tenants as much as they advance. Our most prosperous land owners in this country are those who own small farms and do not furnish homes and employment to negroes. On the other hand, our large land owners, who furnish homes and employment to those without are doing so, in a majority of cases, at a financial loss by allowing their tenants to get into slack business methods.

We all know that as a race the negro is the best collector on earth and they must be taught to pay their debts and conform to a contract or else the whites must enter into no contracts with them and seek other farm laborers. In our business relations we very properly draw no distinction as to color, and the man who complies with his obligations is respected and can at all times find a friend to aid him in time of need. It would be an incentive to the irresponsible, don't care kind of a person to know that he can only expect to receive a just compensation for his honest efforts. Our land owners must apply better business methods to their laborers or be not surprised when the tax collector advertises their land. Far better raise trees on your land than tenants at a loss. In my next I will endeavor to give some of the remedies for some of our ills. FARMER,

Southampton Co., Va.

KAFFIR CORN GROWING IN THE SOUTH.

Editor Southern Planter:

I desire to get in touch with men in Virginia and Maryland, or even in States farther South, who are extensive growers of kaffir corn varieties, commonly called kaffir corn. There is a possibility of developing a considerable market for these goods in the Eastern United States. I am not yet entirely certain that they will be profitable seed crops in this section, but wish to secure the experience of men who have had them under cultivation for several years. There is already a demand for the goods, which at present is supplied with seed shipped from the States of the plains region. I would be very glad to have you bring this matter to the attention of your readers.

CARLETON R. BALL,

Dept. of Agriculture,

Washington, D. C.

Agronomist in Charge of
Sorghum Investigations.

Carrots, turnips, parsnips, and cabbage are not injured by freezing, but are improved in flavor if allowed to freeze slightly. No house or other covering is required except that they be buried in a pit where the earth can come in direct contact with them. A heavy covering of earth is not essential, as freezing and thawing will not injure these vegetables provided they are in contact with the earth when thawing. It is much easier to get at the vegetable if the ground is not frozen hard; a covering of straw over the earth mound will guard against this.

For cabbages, dig long ditches wide enough to take two rows of heads, or wider still where there is a large quantity to store. Pull up the heads and pile in the ditch with the stalks up. Cover with earth and round off the top of the mound.

Trucking, Garden and Orchard.

TRUCK GROWERS' MEETING AND THE VIRGINIA TRUCK EXPERIMENT STATION.

Editor Southern Planter:

The annual meeting of the Southern Produce Company, an association of some 350 truck growers, was held in the Eagle's Hall, Norfolk, Va., October 28, 1968. The regular order of business was dispensed with in order to listen to addresses by Prof. Corbett, of the United States Department of Agriculture; Mr. G. W. Koiner, Commissioner of Agriculture of the State of Virginia, and Prof. T. C. Johnson, Superintendent of the Virginia Truck Experiment Station.

Prof. Corbett discussed the importance of proper seed selection, and of co-operative methods in selling truck products. He cited numerous illustrations showing the very great importance of growing plants from seed true to name, and of the proper strain. The importance of strains adapted to local conditions was very strongly emphasized. The fact that a given variety of potatoes thus used is more productive in Maine than are others; or that certain strains of cabbage have advantages when grown in New York or Wisconsin, or that the Rocky Ford cantaloupe is well adapted to the high altitude and dry atmosphere of the Rocky Mountain Region, or that certain varieties of tomatoes lead in the market gardens around Chicago is no indication whatever they will all reach an equally high state of perfection when grown under local soil and climatic conditions. The very fact that these plants lead in their respective localities is a strong indication that they are not best suited for this region. It was also pointed out that market gardeners and truck growers often lose a large per cent. of their crops because the seeds they planted are of inferior variety, or are not true to name. A truck grower cannot afford to assume the risk of planting inferior seed when he expects to spend from \$100.00 to \$200.00 per acre in growing and marketing the crop. The speaker urged the importance and advisability of the Association growing at least a large portion of the seeds used in this vicinity. This could be accomplished by having some of the seeds grown locally, and the others produced under contract in localities where the seed reaches its highest state of perfection either at home or abroad.

Co-operative selling was also emphasized. There is scarcely any other line of business in which men will invest all their capital and labor to produce a marketable commodity, and then consign this commodity to a non-interested party in a distant part of the country, and ask him to sell it, and return to the producer what he pleased. In other words, men engaged in practically all other lines of production insist on watching closely the sale of the product as well as the production. It was suggested that the Produce Association take up this phase of truck work as a special feature.

Commissioner Koiner, in his remarks, gave special emphasis to the methods practiced by the French market growers in selling their products in English and other fell as low as three or four per cent. It was thus shown

markets. It is the custom of the produce growers to send a committee to Liverpool, London, and other large centers to watch the selling of their products. If the consignment of goods reaches a commission merchant in a damaged or unsalable condition, the committee and the commission merchant, together, determine what shall be done with the damaged articles, thus the growers as well as the commission men are represented in the deal. The advisability of the produce growers inaugurating some such scheme was strongly urged.

Professor Johnson confined his remarks to the work of the Virginia Truck Experiment Station, and extended an invitation to the members of the Association to visit the station in a body. He pointed out the work of the station in controlling insects and fungous diseases, showing two instances where the values of crops had been doubled by proper applications of fungicides. The importance of crop rotation, fertilizers and forage crops was also emphasized. At the close of these remarks the Association adjourned to the Monticello Hotel, where a bountiful six-course dinner was enjoyed by 150 members.

At the close of dinner the members of the Association took the trolley car to the Experiment Station. Representatives of the station met the party at the trolley, and escorted them over the farm. The barn, packing sheds and implement room were the first places of interest inspected.

The party was conducted over the grounds and through the buildings in order to get a somewhat general idea of the nature and scope of the station work. Then the several points of interest were taken up more in detail. The sweet potato work was both interesting and instructive. The station has growing a collection of about ninety different varieties: practically all the known American varieties of any importance, together with many of the sorts grown in foreign countries. Specimens of nearly all of the varieties were arranged in several closely related groups thus greatly facilitating intelligent examination. Both the good and bad points of the leading varieties were discussed. Some of the heaviest yields were poor in cooking qualities, while others were lower in yield, but better for table use. Here were shown potatoes varying in color from almost white to deep purple and red. One or two varieties of varying sizes, shapes and colors were certainly interesting to all sweet potato growers.

The work on Irish potatoes was even more interesting in some respects than that on the sweet potatoes, sixty-three of the leading varieties having been under close study during the season. Seed for the first crop was planted in the early spring and the mature tubers harvested the first week in July. From these tubers a second planting was made in order to determine the adaptability of the different varieties for second crop work in this locality. Some three or four varieties showed a stand of from ninety-five to ninety-eight per cent., while others fell as low as three or four per cent. It was thus shown

plainly that many of the popular varieties are not adapted to second crop work, while others are.

The station has inaugurated a series of fertilizer tests that are of extreme interest to the truckers. In planning this work an attempt was made to use practically all the fertilizer ingredients known in the trucking section. For instance it is desirable to know whether nitrogen in the form of sulphate of ammonia, nitrate of soda, dried blood, or Peruvian guano is preferable for certain truck crops, and also what amount of the different fertilizers may be used economically. The results of this work are interesting and instructive. It shows that much is yet to be learned in the practical application of fertilizers to truck crops, some combinations now in use being of very little value, while others are exceedingly profitable.

A number of forage crops consisting of combinations of sorghum, Kaffir corn, cowpeas, soy beans, millet. Newman beans, and several other leguminous and non-leguminous plants were grown as catch crops to be sown after winter cabbage is harvested. The tests show that certain combinations of cow peas and mixed sorghum yielded as high as 10,700 pounds of cured forage per acre, while other combinations in which millet was substituted for the sorghum yielding as low as 2,400 pounds per acre. This forage crop work has proven exceedingly interesting especially to the dairyman.

A high pressure spray pump, specially fitted for truck crop work was exhibited. This machine is arranged to spray four rows at once. The nozzles being so placed that the liquid strikes the plants from the side, thus wetting both the top and the bottom of the leaves. By use of this arrangement the station has almost completely cleaned large cabbage plants of aphides and other insects. In order to accomplish this, however, the liquid was applied under a pressure of ninety to 100 pounds.

The members of the party were very well pleased with the work accomplished by the station in the first year of its existence, and expressed high hopes of its future usefulness. These visits which bring the station and the farmer into close relationship are always desirable. Personal touch counts for a great deal in advancing agricultural work of any kind. "Visitors Welcome" is one of the fundamental principles of the management of the station.

A MEMBER.

ANNUAL MEETING OF VIRGINIA STATE HORTICUL TURAL SOCIETY.

Editor Southern Planter:

The annual meeting of this Society will be held in the Y. M. C. A. Hall, and the fruit exhibit in the Masonic Temple, Lynchburg, on January 6th, 7th and 8th, next. The scope of the Society's work having been so much extended this year necessitates a three-days' meeting instead of only two, as in previous years. The three principle subjects for discussion are (1) Fruit Packing, reports of experience of the first year's working of the two Packers' Associations, and plans for the future working on these lines. This guarantee of packing up to grade marked is the very best means of increasing the demand for our

apples, and giving confidence to the buyers. The Society is fortunate in having secured the attendance of Hon. A. McNeill, Chief of the Division of Fruit under the Canadian Government, who will give the experience of Canada on these lines, where it has been in practice for some time. (2) Adjustment of Express Rates, also a matter of vital importance to our fruit growers. (3) The Future Policy of the Society, with regard to its more extended scope of work. In addition, we are going to have as one of the features of the meeting an afternoon devoted to a Field Demonstration of Spraying in the city park, with explanations by competent demonstrators. Manufacturers of spraying outfits are invited to show the workings of their machines, both hand and power. Three stereopticon lectures will be given, one at each night session. One of these will be on the best shade trees for street planting, at the request of the Civic League. Another will be a comparison of conditions existing in Pacific Coast orchards as compared with Virginia, with samples of the Pacific Coast apples and their manner of packing, to compare with Virginia apples. Addresses will be made on various topics of horticultural interest by Hon. A. McNeill, Ottawa, Canada; Dr. M. B. Waite, United States Department of Agriculture; Hon. G. W. Koiner, Commissioner of Agriculture, Virginia; Dr. S. W. Fletcher, Director; Prof. H. L. Price, Dean, and Prof. J. L. Phillips, all of Blacksburg; Prof. H. E. Van Deman, the well-known horticultural expert; Hon. Henry C. Stuart, S. B. Woods, Dr. Emerson, Mr. W. W. Sproul, H. C. Wysor, and others, of Virginia; Mr. Wesley Webb, the well-known Secretary of the Peninsula Horticultural Society of Delaware, and possibly Colonel Brackett, of the United States Department of Agricultural, Washington, and Dr. S. A. Robinson and Prof. Alwood, of Albemarle Co., Va.

That the Virginia fruit exhibited by the Society at the State Fairs in North and South Carolina was admired, the subjoined letter shows. The Society was most fortunate in the selection of their representative, Mr. H. C. Wysor, of Pulaski county, who installed the exhibit at the various Fairs, and lost no opportunity of praising his native State, a fine type of the Virginia gentleman, a practical apple grower, and possessing tact and humor, no man better fitted to fill the position could have been selected. A good premium list has been issued for the fruit exhibit to be held in conjunction with the annual meeting. Arrangements have been made with Prof. H. E. Van Deman to act as judge of awards, a position he ably filled at the recent State Fair in Richmond. Admission to all sessions (except that set apart for executive business) will be free to the public, who are cordially invited to attend. Special arrangements have been made for members of the Society at the leading hotels, and the Lynchburg Traction Co. will transfer the members to and from the City Park for the Field Demonstration free of charge. A strong local committee headed by Hon. George E. Murrell, President of the Society, will look after the entertainment of the visiting members.

Crozet, Albemarle Co., Va. WALTER WHATELY,

Secy. & Treas. State Horticultural Society. November 16, 1908.

The following letter, received by Mr. Walter Whately,

of Crozet, speaks for itself. Several Albemarle county the matter and in the way of making arrangements, placgrowers were represented by exhibits in this collection:

N. C. State Fair, West Raleigh, N. C., Oct., 1908. Mr. Walter Whately, Secy.,

Va. State Horticultural Society, Crozet, Va.

Dear Sir:-The Virginia fruit exhibit at our State Fair is indeed a very creditable one. I am very glad that you had this fruit sent down here, as it is helping out our exhibit wonderfully, and it is also an eye opener to many of our North Carolina farmers, showing them that excellent fruit can be grown in the mountains of the South.

I hope that you will continue to make an exhibit here in future years. We shall do everything to help you in

ing fruit and showing it to the best advantage.

This year we were hardly prepared for the exhibit, as I did not know what was coming until recently. Next year we shall have far more room and far better facilities for such an exhibit, and we would be glad indeed to see an exhibit from you again.

I was very glad to meet Mr. Wysor, who is looking after your exhibit in fine shape. With best wishes, I am,

Yours truly,

F. C. REINER,

Director Horticultural Exhibits of State Fair. This is indeed encouragement.-Ed.

HOME-MADE SOLUBLE OILS FOR USE AGAINST SAN JOSE SCALE.

Editor Southern Planter:

The lime-sulphur preparation has many advantages over the prepared oils, by no means the least being its cheapness, the cost being about one-third. It also has the advantage in that it controls peach leaf curl, if applied before the buds swell in the spring, and helps in a general way to clean up and improve the condition of the trees. It has yet to be proved that the oils do not act in the opposite way, and that repeated applications of oil would not be a serious detriment to the trees.

Lime-sulphur is a little more trouble to prepare. If it is to be used in large quantity, a steam outfit may be desirable, though the method of cooking in kettles over an arch is very satisfactory. should, of course, be applied thoroughly, so as to coat every part of the tree. The accompanying cut shows an orchard well sprayed with lime-sulphur.

If a long hose and rod are used in applying lime-sulphur, and care is taken in making the application, it is not necessarily such a disagreeable material to handle.

A method of preparing oils at home is now coming into use, the product being known as the Home-Made Soluble Oils. These oils were tested by us last spring and proved to be just about as effective as the prepared oils and the cost is about one-third. We tested three formulae that differ in the kinds of oil to be made soluble each being about equally effective if the same per cent. of oil is used. There is a slight difference in favor of formula No. III, in which paraffine oil is used, but the cost is also a little greater.

Orchard tests of these oils prepared by formula No. III were made by W. J. Price, of this office, March 4, 1908, in the apple orchards of Melvin Green, located near Winchester, Va. Two plots, each containing fifty six-year trees, were sprayed with this material at the rate of one emulsion ready for applying to the trees. part to twelve parts of water and one to fourteen parts of water, respectively.



cation was made at a strength of one to twelve of water. The results were not quite as good where it was used at one to fourteen, except on a tree where the application was very thorough.

Mr. Green used about four thousand gallons of this emulsion, diluted one to fourteen, the past spring, with fairly satisfactory results, but we cannot recommend its use weaker than one part to twelve parts of water.

The method of preparation is a little more complicated than lime-sulphur, because of the fact that more materials enter into its composition, but the operation is not difficult. There are three distinct processes in making this spray material:

First, making the soap solution.

Second, adding the required amount of oils and water to make the soluble oil.

Third, diluting the soluble oil with water to make the

No heat is needed except in making the soap solution. and in this the material is easier to handle than lime-No injury was observed to any of the trees. Examina- sulphur, but it is easier to make up a small lot of limetions August 30, 1908, indicated that 991-5 per cent, of the sulphur than of the oil. If some one will prepare the insects (San Jose scale) had been killed where the appli- material for the entire neighborhood it can be used very

nicely on small orchards, as it will keep almost indefinitely.

It does not seem necessary to go into methods of preparation, since the report on this work is now in press, and can be obtained in a short time by addressing the State Entomologist, Blacksburg, Va.

Trees infested with San Jose scale should be sprayed each year during the dormant season. It is best to apply the spray in the fall, since the weather is usually more favorable at that time, and one is not so rushed with other work.

J. L. PHILLIPS,

Blacksburg, Va.

State Entomologist.

MARKET GARDENERS ORGANIZE.

Editor Southern Planter:

On the 30th of October, from one hundred and fifty to two hundred earnest men met in the city of Cleveland, Ohio, for the purpose of organizing a national association that will take in all the truckers, station investigators in horticulture and editors of journals engaged in the promotion of horticultural work.

There were representative gardeners from Massachusetts, New York, Pennsylvania, Maryland, Ohio, Kentucky, Indiana, Illinois and Michigan, and the result was the organization of the "Association of Greenhouse Vegetable Growers and Market Gardeners of America," an ambitious title, and one which, it is hoped, will expand to gather in all the men North and South who are engaged in market gardening either out doors or under glass. As representing the South, I felt that I was going into the "enemies country," but the men gathered there from the North gave earnest attention to what I had to say about the advantages of the South.

The first morning session was spent in an interchange of views and the appointment of a committee on Constitution to report the following day. In the afternoon, under the guidance of one of the larger growers there. Mr. Reutneke, we all went in wagons and motor cars out into the market garden suburbs of Cleveland and examined place after place. We found growers there with acres under glass and all devoted to the growing of the Grand Rapids lettuce, and I saw at once there was here no competition with our North Carolina lettuce growers, for they could not sell that sort of lettuce in the Eastern markets if they grew it, for the markets of New York and Philadelphia demand a heading lettuce, while the Western cities take the loose, curly Grand Rapids. In this I think they are right, for I grow it for my own use and prefer it to the head lettuce, for when slightly crowded the leaves blanch finely and are far more tender than those of the head lettuce. But in growing for market the gardener must grow what his market wants, and the Eastern markets want head lettuce, and the grower cannot afford to do missionary work and teach them better.

But seeing acre after acre of lettuce in these green-houses, and hearing that at Ashtabula the culture was much larger, one wonders who will eat all the lettuce. I saw them cutting for market Grand Rapids lettuce from their greenhouses no larger than I have at home out doors, and I realized the advantage of a little more sunshine. In fact, it seemed to me at Cleveland, and it has seemed before at Chicago, that up there on the Lakes they do

not know what sunshine is in late fall and winter. Looking out over the lake one does not see the sharp skyline we see on the Eastern seaside, but water and sky seem to mingle into a smoky haze.

If they can make money growing vegetables under glass in that murky winter climate, what could the growers has the upper South do with greenhouses in their abounding sunshine! Some day the truckers of Southeast Virginia and North Carolina will understand the advantage they have, and then there will be a real competition in winter products, with the advantage in favor of the Southern men. The organization of the Association was E. A. Dunbar, of Ohio, President; S. J. Perry, of Michigan, Vice-President; S. W. Severance, of Kentucky, Secretary; S. B. Chester, of Ohio, Treasurer. Various directors were also chosen as an Executive Board, and a Vice-Fresident for each State. The Market Growers Journal of Louisville, Ky., was chosen as the organ of the Association. As a member of the Executive Board and Vice-President for Maryland, I hope to get our truckers to take an interest in the new Association and add to it members from the trucking sections of the South. W. F. MASSEY.

THE CURING AND THE MARKETING OF TOBACCO IN THE NORTHERN NECK OF VIRGINIA IN 1796.

Editor Southern Planter:

Isaac Weld, an Englishman, an exceptionally well informed and accurate observer, who made a tour of this country in 1795, 1796, and 1797, published at London in 1800 two volumes of American Notes. He was in the Northern Neck of Virginia the spring of 1796 and writes as follows of the method of handling tobacco there:

"When arrived at maturity which is generally about the month of August, the plants are cut down, pegs are driven into the stems, and they are hung up in large houses, built for the purpose, to dry. If the weather is not favorable for drying the leaves, fires are then lighted, and the smoke is suffered to circulate between the plants; this is also sometimes done to give the leaves a browner color than what they have naturally. After this they are tied up in bunches of six or seven leaves each, and thrown in heaps to sweat; then they are again dried. When suffi-. ciently cured, the bundles are packed, by means of presses, in hogsheads capable of containing eight hundred or one thousand pounds weight. The planters send the tobacco thus packed to the nearest shipping town, where before exportation, it is examined by an inspector appointed for the purpose, who gives a certificate to warrant the shipping of it, if it is sound and merchantable, if not, he sends it back to the owner. The inspectors are all sworn, are paid by the State, and are not suffered to take any fees from any individual. Skilful merchants can accurately tell the quality of the tobacco from knowing the warehouse at which it has been inspected.

Where the roads are good and dry, tobacco is sent to the warehouses in a singular manner. Two large pins of wood are driven into either end of the hogshead, by way of axies; a pair of shafts, made for the purpose, are attached to these, and the hogshead is thus drawn along by one or two horses; when this is done great care is taken to have the hoops very strong.

Prince Edward County, Va. ALFRED J. MORRISON.

Live Stock and Dairy.

MAKING CHEAP PORK WITH GRAZING CROPS.
(Continued from November issue.)

Editor Southern Planter:

A Review of the Experimental Data on Hog Grazing.

A review of some of the more important investigations

with regard to pasturing hogs will not be out of place, though, strange to say, this important subject has not received the attention which it merits. In certain experiments made by the writer the yield of pork per acre from various crops was as follows. With winter oats sown early the previous fall, 643 pounds; with Whippoorwill cowpeas, 562 pounds; with sorghum, 400 pounds, and with soy beans, 600 pounds. The hogs were confined on grazing crops from June 2d to November 8th-a period of 150 days. During that time they received corn and wheat meal at the rate of one pound per day and the gain was .5 to .8 of a pound per head per day. In Utah where hogs were fed on a grain ration they gained .94 of a pound per head per day; when receiving grain on a grass paddock they gained 1.21 pounds per head per day, showing conclusively the value of succulent food for fattening animals.

Grain, Grass and Alfalfa.

In Nebraska hogs were grazed on alfalfa, one lot receiving ground corn and another lot ground wheat. Those receiving corn made a gain of 1.22, and those receiving ground wheat, 1.30 pounds, showing that either one of these concentrates makes a fine adjunct for hogs on grazing crops. Several experiments were made to determine whether an alfalfa pasture would maintain pigs without grain or milk. In some instances there was a slight gain, and in some a slight loss, the experiments indicating, as a whole, that hogs would just about hold their own on alfalfa.

GRAIN, GRASS AND ALFALFA

STATION,	Ration Fed	verage Daily vain.	Food eaten per 100 lbs. gain.
Utah Utah Utah	Grain Grain and Pasture Corn and Alfalfa Wheat and Alfalfa Alfalfa Pasture*.	1.21 1.22 1.30	430 385 400 376

^{*}But little more than maintained.

Rape and Adjuncts.

In certain experiments made at the Virginia Station a year ago, it appeared that rape in a luxuriant condition was a maintenance ration for brood sows. At the Alabama Station, where rape and corn-meal were fed, the gain per head per day amounted to .56 of a pound, showing that cheap gains can be made from this conbination. In Wisconsin rape was fed with two parts of corn and one part of middlings, and a gain of 1.07 pounds made. Where the hogs were grazed on clover with the same grain ration a gain of one pound per head per day was made. At the same station hogs fed grain and middlings made a gain of .71 of a pound per head per day. Another lot similarly fed, but allowed to graze on rape.

made a gain of .88 of a pound per head per day, which it is plain to see, would effect a considerable saving in the grain where a large number of hogs are handled.

STATION.	Rations Fed.	Average Dany Gain	Food eaten Per 100 lus. gain.
Wisconsin Wisconsin	Rspe*	.56 1.07 1 00 .71 .88	290 362 390 487 420

^{*}But little more than maintained.

Peanuts and Chufas.

At the Arkansas Station peanuts were grazed, and the daily gain was .57 of a pound on an estimated yield of ninety bushels per acre; on chufas the gain was .35 of a pound on an estimated yield of 184 bushels per acre; on corn, .81 of a pound. According to these figures an acre of peanuts would make 1,252 pounds of pork; an acre of chufas, 592 pounds; and an acre of corn, 436 pounds. At the Alabama Station peanuts with a half grain ration gave a daily gain of .50 pound per head per day; peanuts alone, .41 of a pound; chufas and a half grain ration, 1.46 pounds; and grain alone, 1.36 pound.

These figures all tend to show the importance of grazing crops, and the fact that they can be made to take the cured nuts can afford to utilize them for the purproper to say that the Arkansas figures on peanuts seem remarkably high, for an acre of alfalfa under most favorable conditions is only credited with producing 1,000 pounds of pork in the course of a year. Peanuts and chufas do not make a satisfactory quality of pork, but when a limited amount of corn or other flesh hardening grain is fed daily, a fine firm quality of pork is obtained at a low cost. Better results will follow where high grade animals are used. In the peanut region it is doubtful if the farmer who can obtain seventy-five to 100 bushels per acre, and from two to four cents per pound for the cured nuts c an afford to utilize them for the purpose of grazing hogs, even where he is curing fancy hams, but soy beans and cowpeas make excellent substitutes, and, of course, the hogs will gain a good deal on the nuts which are overlooked by the harvest hands.

STATION.	Rations Fed.	Average Dally gain.	Pork per Acre.
Aikansas Aabama Alabama	Peant ts Chufas. Corn Peanuts ½ Grain Ration: Corn Meal 2, Cowpeas 1.	.85 .81	1252 592 436 188
Alabama	Peanuts aloj e. Chufas ½. Grain łavien: Corn Meal 2. Cowpeas l Grain a one.	1.46 1.36	.00

Sorghum and Miscellaneous Crops.

Sorghum is probably a much over-estimated food for

grazing hogs, and, in the writer's judgment, cannot be utilized to much advantage, and is not to be compared to some other crops which might be grown with profit in its place.

The feeding value of corn when combined with cowpeas was brought out nicely in an experiment made in Alabama, where the grain alone made a daily gain of .36 of a pound; whereas, hogs on corn and cowpeas pasture gained .97 of a pound per head per day, or more than twice as much as on the corn alone. Thus, a good cowpea pasture would more than replace half the grain ordinarily fed.

Pumpkins and apples have not a very high feeding value for hogs, though the pumpkins are worth considerably more than the apples. As by-products going to waste on the farm they could be used to advantage, but they will not add much to the body weight of the animals consuming them unless fed with a rich grain ration.

There is often much inquiry as to the feeding value of various forms of roots, particularly sugar beets. These do not seem to be worth much as food for hogs. For instance, at the Montana Station, where grain alone was fed, the gain was 1.20 pounds; with grain and roots, 1.26 pounds. In comparative trials to test the value of turnips, mangels, forage beets, etc., the gain in every instance was under one pound. Like pumpkins and apples, roots may be occasionally utilized, but as a daily diet for hogs they do not possess a high feeding value, and their place could be taken to advantage by some other foodstuff.

_	STATION.	Ration Fed.	Average Daily gain	Food eaten per 100 lbs. gain.
A	labama	Sorghum: Corn Meal 2, Cowpeas 1 Corn. Corn and Cowpea Pasture	.71 .36 .97	328 586 307

Sweet and Irish Potatoes.

Irish potatoes are sometimes utilized as food for hogs. When fed raw they are practically worthless; when cooked they make but little gain. Sweet potatoes are often recommended as a food for hogs, but in experiments made in various States, they have not sustained the claims sometimes made for them by farmers. The only favorable report on their use is from South Carolina, where it was estimated that 200 bushels of sweet potatoes would produce about 370 pounds of pork. In nearly all other instances the gain from their use was slight. It is quite clear that sweet potatoes will not prove profitable as a grazing crop for hogs, and should not be utilized.

STATION.	Ration Fed.	Average Daily gain.	Food eaten per 100 lbs. gain.
Kansas Kansas	Grain Grain and Roots Cooked Irish Potatoes. Skim Milk and Meal Sweet Potatoes	1.20 1.26 1.00 .86	53 7 426 289 3247

Artichokes for the Winter.

While artichokes are generally recommended as a food for hogs, comparatively little work has been done along

this line. In tests made in Oregon it appears that artichokes would not maintain hogs alone, but where a small amount of shorts or corn meal was fed, a fair gain might be expected. In other words, artichokes and 3.1 pounds of grain made a pound of gain where five pounds of grain would ordinarily be required. In experiments made in Canada, it was found that an acre of artichokes, when fed in conjunction with corn meal, barley, etc., would yield pork worth about \$140.00 per acre. In experiments made at the Missouri Station, one bushel of artichokes and three bushels of corn were found to be equal in feeding value to four bushels of corn, and as artichokes will yield anywhere from 400 to 800 bushels per acre, it is quite clear that this crop can be utilized to great advantage for the winter grazing of these animals.

STATION.	Ration Fed.	Average Datly Gain.	Food eaten per 100 lbs. gain.
Oregon	Artichokes and ShortsArtichokes, Corn meal and mixed grain.	.81	309
Canada		1.57	96

Dry Roughness in Winter Feeding.

The question is often asked to what extent dry roughness in the form of protein hays may be fed to hogs. The answer is only in very moderate amounts. In experiments made by the writer, an attempt was made to use silage and chopped pea hay. The results were negative. In elaborate experiments made to test the value of alfalfa hay, it was found that only about one pound of hay would be consumed for from eight to ten pounds of grain to advantage. Where hogs are confined on a single grain ration of a fattening and enervating nature like corn, a little finely chopped, or ground, hay will often prove palatable and acceptable, and will minimize the cost of the ration to some extent. Whenever animals can be induced to eat a moderate amount of roughness, it will be an advantage, but a large amount cannot be fed with success, for the animals will not consume it.

STATION.	Ration Fed.	Average Daily gain	Food eaten per 100 lbs.
Kansas	Grain only		528
Kansas	Grain and Alfalfa Hay		544

The foregoing presents a brief summary of the more important facts obtained with reference to the feeding and grazing of hogs, and shows to the mind of the writer that where intelligence and care are exercised, grain may be made to go at least twice or three times as far as it ordinarily does; that after all, there are only a comparatively few crops well suited for grazing by hogs, and these can be almost universally cultivated with success and with the greatest ease on the part of the farmer. It is quite clear that with a rational system of hog pastures, that twice or three times as many animals could be maintained on the corn and grain raised as at the present time; and, of course, there are unlimited opportunities for extending the cultivation of corn and other important cereals. It is also well established that pork of

the highest quality can be made on these grazing crops, and that dairy by-products are not essential in hog raising.

Cotton Seed Meal and Firm Bacon.

There are some other matters of more than passing importance to hog raisers. The large amount of cotton seed meal made in the South has led to many attempts to feed it to hogs. Practically all of these investigations have been negative in their results. As much as one-fifth or one-tenth of the total meal ration may consist of cotton seed meal, but the amount indicated is so small as to have no appreciable effect on the cost of the ration. Furthermore, there is apparent danger of causing death from feeding cotton seed meal to hogs under the most approved methods, though it seems that the small amounts mentioned above may be fed for indefinite periods to animals on grazing crops. Other foodstuffs can be used to balance up the ration of corn with perfect safety, and the cotton seed meal can be fed to such advantage to horses, mules, cattle and sheep that it is not necessary to incur any risk by feeding it to hogs. Cotton seed meal has one advantage which should not be overlooked, in that it seems to produce a harder, firmer bacon, which is a very important matter, as some other crops which are utilized largely for grazing, notably peanuts, make soft pork. Corn, as a rule, has been used to harden up the flesh, and has seemed to be very satisfactory up to the present time. In Canada, where export bacon of a high quality is made for the English market, barley has been used for the hardening process to great advantage, and as barley can be grown as a winter crop with success in the South, its cultivation might be properly extended, and in the course of time it should become an important adjunct in feeding.

Winter Maintenance and Finishing.

In conclusion, it will be proper to call attention to some investigations made to ascertain the cost of fattening hogs during the winter, for it will sometimes happen that they cannot be finished on grazing crops alone. As a rule, an attempt is made to fatten them on corn meal straight. This, as the following results will show, is a mistake. Five lots of hogs were fed as follows two winters ago, at the Virginia Station: Lot 1 receiving corn meal and water, gained .24 of a pound per head per day; lot 2, corn meal, two parts, and middlings, one part, gained .67 of a pound; lot 3, corn meal, one part, and middlings, two parts, gained .86 of a pound; lot 4, corn meal, one part, and middlings, one part, gained 1.35 pounds; lot 5, shelled corn, one part, and middlings, one part, gained 1.26 pounds. From these results it is clearly evident that corn meal by itself is not a good fattening feed for hogs, much less satisfactory as a maintenance ration; but that when combined with middlings excellent results will be obtained, and it is economy to make the combination suggested.

Corn and Dairy By-Products.

In the following table is given a summary of some in-

vestigations covering the value of corn and skim milk for fattening swine:

Group.	RATION.	Meal ea en per lb. gain.	Gain per bead per day.	Cost of 1b. of gain ets.	Per cent good mest.	Profit per group.
1 2 3	Corn meal and water Corn meal, Skim milk. Corn meal. Skim milk, hay	 4.6 2.1 2.9	$\frac{1}{2.3}$	3.9 4.2 5.2	73.6 78.5 77.7	7.16 9.47 3.50

It appears from these results that the most profitable ration was one of skim milk and corn meal. The attempt to feed pea hay with skim milk and corn meal was not a success. Notice that groups two and three made over two pounds of gain per head per day; whereas, those on corn meal and water made only one pound, demonstrating clearly that the farmer should utilize slops and dairy by-products whenever possible in the winter fattening of his hogs. According to these results, with pork selling at 4.5 cents, corn meal would be worth 66 cents per bushel of fifty-six pounds, and skim milk about 28.3 cents per 100 pounds. As the hogs used in this experiment were purchased in a half-fat condition from a farmer, and sold when fattened at a good profit, it is further evidence that the farmer can utilize all the by-products on his farm to good advantage, and should finish his hogs before selling them.

Corn, Dairy By-Products and Protein Foods.

It was thought for a long time that corn meal and skim milk furnished an ideal ration for hogs. Later investigations have indicated that corn meal skim milk and some protein meal will give still better results. To determine this point a series of experiments were made by the writer with the following results:

Group.	RATION.	Average daily gain lbs	Net cost lb. of gain cts.	Profit per group.	Total gain per group 1bs.
4. 5.	Corn meal and water orn meal 1, Skim milk 8 Corn meal 2, Wheat meal 1, S. Milk 8 Corn meal 2, Soy beans 1, S. milk 8 Corn meal 2, Wheat meal 1, S. milk 3 Corn meal 2, Wheat meal 1, S. milk 9.	.50 1.35 1.30 1.30 1.35 1.40	3.5 3.5 3.3	\$1.05 4.96 4.13 3.38 7 63 b.62	118.7 309.0 304.3 307.0 813.5 330.7

Notice that the cost of a pound of gain was much greater with the corn meal and water, than with any other ration, and notwithstanding the fact that soy beans were charged up to the hogs at a high price, it still proved an economical ration; and where wheat meal was used in addition to corn meal and skim milk, the net cost of a pound of gain was the same for both rations. Observe, however, that the hogs receiving corn meal, wheat meal and skim milk made a larger profit than those receiving corn meal and skim milk alone. It is evident from these facts, as well as some previously stated, that better results will follow the use of corn meal and some protein meal with or without skim milk, as the combination insures larger gains at a lower cost and a superior quality of hams and bacon.

There is thus everything to encourage the breeder and feeder of hogs in the South, whether he contemplates finishing his animals on pasture or in pens during the winter. The cheapest pork and the largest profit will always be made from the proper utilization of grazing crops, and this is the method, according to the evidence presented, which should be followed by our farmers. There is a bright future ahead for those who engage in hog ranching and follow it up along intelligent lines.

A. M. SOULE.

Agricultural College, Ga.

FEEDING CORN AND BY-PRODUCTS.

(Continued from November issue.)

Editor Southern Planter:

By-Products of the Corn Grain.

Corn is extensively used in manufacturing various forms of food for man and beast. As a result, there are a number of important by-products derived from this cereal which are worthy of consideration, and attention is especially attracted to these for the reason that it is clearly evident from this resume of investigations as to the feeding value of corn that some concentrate should be fed along with it, for nearly all classes of live stock, and practically under all circumstances. If it is necessary for the farmer to buy something to feed in connection with corn, the question naturally arises as to what he should use. He should first grow and utilize as extensively as possible the leguminous crops, which are rich in digestible protein. It has been conclusively shown that these can be made to take the place of a very considerable amount of the high-priced protein foods which have hitherto been purchased and used in connection with corn in feedding all classes of farm live stock. This is a point of such vital economic importance that it cannot be emphasized too strongly.

If leguminous crops fail or are unavailable for one reason or another, some other forms of concentrates must be used, and it is frequently desirable to use some substance rich in protein, and those foods classed as high-protein foods would be the ones the intelligent farmer would select to supplement his roods. Among the most important of these would be cotton seed meal, linseed meal and gluten meal, the latter being a corn by-product obtained in the manufacture of corn starch. As a rule, cotton seed meal will be the cheapest and most desirable of these to purchase, especially in the South. Linseed meal and gluten meal will probably be cheaper, and as satisfactory in proportion to use in the West and Northwest.

The digestible nutrients in the principal corn by-products is shown below, and some notes on their feeding value will not be out of place. That the value of gluten feed may be properly estimated, the digestible constituents in a ton of cotton seed meal and linseed meal are also shown in this table:

	Protein.	Carbohy- drates.	Ether Extract,
Corn bran. Cluten meal. Germ meal. Hominy Chops. Linseed meal. Cotton seed meal.	148	1196	92
	516	866	220
	180	1224	124
	150	1104	136
	564	802	56
	744	338	244

Digestible Nutrients in One Ton.

Gluten feed consists largely of the whole grain less a part of the starch, and because of its fine physiological condition and richness in fat and protein, it is well adapted for use with other less concentrated grains in the preparations of rations for beef and dairy cattle. In feeding experiments it has shown up favorably in comparison with cotton seed meal and linseed meal, though not so rich in digestible protein as these substances. Gluten meal, which does not contain the hull and germ, is very valuable as a source of fat and protein, and can be fed similarly to gluten feed, though owing to its richness, only moderate quantities should be used in rations for dairy cows. Corn oil meal or cake consists of the pressed germ of the corn grain, and is very rich in fat and protein. Only moderate amounts should be fed per day. Corn bran and corn germ, which consist chiefly of hulls and germ, are rich in fat and carbohydrates, and make very good substitutes for corn meal. Hominy meal, consisting of the softer parts of the grain, contains less water than corn meal, one to two per cent, more protein. and twice as much fat, due to the presence of a considerable proportion of the corn germ. Hominy meal is rated as having ten per cent. greater feeding value than corn meal. The extensive series of by-products resulting from the manufacture of corn into palatable forms of food for man can be fed advantageously on the average farm, especially as a number of them are rich in protein, and hence, combine admirably with corn.

In conclusion, both corn fodder and corn stover can be utilized extensively and profitably for the winter maintenance of live stock kept on the average farm. Their feeding value is not as generally appreciated as it should be, for a review of the situation reveals the fact that shredded stover and corn fodder can be made under favorable conditions to replace timothy hay. Corn of itself is an unequalled food for fattening purposes, but not being well balanced, it will give better results when fed to beef and dairy cattle, in combination with cotton seed meal, or some leguminous hay, like alfalfa or red clover. For hogs, corn in combination with skim milk, or some protein food-stuff, like wheat or soy bean meal, gives much better results than when fed by itself.

These views are somewhat at variance with those held by many farmers, but they are based on experimental data, and on that account should carry conviction to the mind of the average man.

A. M. SOULE.

Agricultural College, Ga.

ABERDEEN ANGUS CATTLE.

Editor Southern Planter:

In the November issue of the Planter, I see Mr. French's article on Angus as milkers. I can substantiate what Brother French says in regard to the Angus cows as milkers. I also have raised calves weighing 500 pounds at five month old, with nothing except their mother's milk, and I have made as good calves as I have seen anywhere, on one-half of the milk and no feed. I never have had a bad milker since I have owned an Angus herd. I know of some herds of the beef breeds in my section that do not supply the family in milk and but-

ter, that are treble the size of my Angus herd. There are grade Angus cows in my county that cannot be bought for \$100.00, on account of their milking qualities.

I know they are not generally considered good milkers by those who have never tested them. All I ask is for a trial. I have a neighbor who owns twelve acres of land, and lives on the mountain, who keeps three or four half-bred Angus cows, and makes butter to sell. He tells me that he would not exchange them for any other breed that he has tried, and says they winter and do better on a third less feed.

Pulaski Co., Va.

AUCTION SALE OF BERKSHIRE HOGS AT THE VIRGIN!A STATE FAIR.

On Wednesday, October 8th, 1908, there was an auction sale of Berkshire hogs held in the swine pavilion of the State Fair. There were a fine lot of excellent hogs offered for sale, but the prices received were exceedingly poor, in many cases being no better than pork prices. One cause of the low prices was due to the fact that there were too many boars offered for sale, and too few sows. The sows were in the greatest demand, and brought better prices, but even they brought exceedingly low figures.

Those desiring registered Berkshires missed a golden opportunity of getting fine hogs at exceedingly low figures. It is to be hoped that at the sale at the Fair next year the buyers will turn out in force, and get fine stock at their own prices.

The hogs sold were as follows:

Sold by Moore's Brook Sanitarium Co., Charlottesville, Va.: First—British Lord, three-year-old boar, to W. H. Brauer, \$26.00. Second—King of the Brook, two-year-old boar, to W. A. Willeroy, \$26.00. Third—Lady's King II., yearling boar, to T. J. King & Co., \$21.00. Fourth—Bonnie's King, under six months' boar, Dr. F. A. Pettit, \$11.50. Fifth—Bonnie's King II., under six months' boar, to S. R. Carter, \$11.00. Sixth—Bonnie's King III., under six months' boar, to J. C. Kidd, \$12.50. Seventh—Princess' King, under six months' boar, to W. B. Wood, \$11.00.

Sold by Mr. W. A. Willeroy, Romancoke, Va.: First—Pride of the Farm, under twelve months' boar, to W. H. Brauer, \$10.00. Second—Leone's Son, under twelve months' boar, to W. H. Brauer, \$10.00. Third—Forgotten's Lad, boar, under twelve months, to W. H. Brauer, \$5.00. Fourth—Maiden Mattaponi, sow, under twelve months, to T. J. King & Co., \$11.00. Fifth—Lass Forgotten, sow, under twelve months, to W. B. Frasier, \$9.50. Sixth—Morning Mist, sow, under twelve months, to J. L. Nuckols, \$8.00. Seventh—Mark No. 94, sow, under six months, to Dr. F. A. Pettit, \$8.00

Sold by J. H. Fraser: Sow, under one year, to J. S. Walker, \$18.00.

Sold by E. L. Ross, Bedford City, Va.: First—No. 328, Pride's Duke, boar, to J. T. Lawson, \$12.50. Second—No. 360, Glen Duke, boar, to J. L. Nuckols, \$7.00. Third—No. 251, Silver Leaf, sow, to J. T. Lawson, \$9.50. Fourth—No. 252, Golden Leaf, sow, to W. H. Brauer, \$9.40. Fifth—No. 398, Count Richmond, boar, to F. A. Pettit, \$8.50. Sixth—No. 234, Duke of Hilton, boar, to W. H. Frasier, \$7.50. Seventh—No. 280, Glen Beauty, sow, to J. T. Law-

son, \$15.00. Eighth—No. 269, Belle of Virginia, sow, to T. J. King & Co., \$13.50. Ninth—No. 306, Lady Bedford, sow, to J. C. Kidd, \$14.50. Tenth—No. 307, Count of Bedford, boar, to J. C. Lawson, \$10.00.

THE FUTURE OF CATTLE IMPROVEMENT.

If the beef cattle breeders of America have not wholly ceased to think, they will soberly confront a few startling facts and govern themselves accordingly.

Meritorious cattle of all the breeds are bringing low prices at sales. Some have been sacrificed on the bargain counter. Trade in general is at a low ebb. Many holders of pedigre beef cattle, who made a well-intentioned start in the industry when prices were on a much higher level, are discouraged. Some of them are throwing over their stocks at much sacrifice. Incalculable damage has been done the entire movement which makes for beef cattle improvement in this country.

Causes are plain. A severe and widespread drouth, the disastrous effect of which few people appreciate to its full measure, is the chief cause. The long-continued high price of corn and other grains contributes a material factor; the panic with its consequent slackening of the wheels of commerce and lessening of consumptive capacity, and the fall in price of market cattle following the industrial paralysis, all contributed elements which have affected unfavorably the business of the pedigree cattle breeder. A lightening of the ballast of the ship has resulted. We have pleaded with breeders against needless sacrifice, but at such times all appeals fall on dull ears.

But even the blindest must see a great light in the facts and figures now available. A mighty nation, suddenly stayed in its onrushing upbuilding that was watched by the world with wonder, has incontestably begun again to gather impulse. Like a huge grayhound of the sea, which strikes its iron prow against a rock, and with reversed engines reels under the shock, but is quickly pulled off unscathed and trembles again under the forward movement, so industrial America has survived the shock of its financial distress and bounds forward to material development, interrupted but not destroyed by the panic. This means a maximum consumption by an imperial people whose standard of living is the highest in the world. Meat is the fundamental basis of its daily rations.

The law of supply and demand is seldom suspended, never abrogated. Demand is beginning its march toward the maximum. What of supply? The figures of the market place show that during the past ten months there has been a shortage of nearly 1,000,000 cattle at the large markets of primary receipts. If demand had been normal only the imagination could have set limit to the price of beef. Liquidation has proceeded for more than two years from range and farm, until we stand face to face with a shortage of such vast volume as to occasion seemingly wild predictions of future prices of beef. Stock yards trade does not hesitate to talk 9-cent cattle and 10-cent cattle during the next six months. The first-named figure was nearly reached this year and would undoubtedly have been touched but for the restricted consumption.-Breeders' Gazette

The Poultry Yard

POULTRY NOTES.

This month will doubtless establish a new record for prices on fresh laid white eggs, as they sold in New York on November 20th, for fifty cents per dozen wholesale. This means nearly six cents a piece for such eggs to the consumer. These figures show very plainly that there is a great shortage in cold storage eggs, and also a limited supply of fresh laid stock. If Southern farmers could be made to realize the possibilities of this winter egg trade, and would unite to supply it with first-class stock, the South could not only supply the Northern consumers during the winter months, but could hold a great share of the trade throughout the entire year.

At the same time that fancy white eggs were selling at fifty cents per dozen, Southern eggs were quoted at twenty-three to twenty-seven cents. Many people cannot understand wby there should be such a great difference in these quotations. It is wholly a matter of quality. We can, and a few of us do produce just as good eggs here in the South as can be produced anywhere, but the trouble is that so many people are careless, and do not produce good eggs to begin with, and then do not handle them with any thought of realizing any particular prices for them. Many people think that eggs are eggs, and that they will sell at the market price anyway. Commission men buy eggs in two ways. First: Strictly fresh, fancy, clean eggs, guaranteed, and common stock. These fancy eggs come from individual shippers who have a trademark, name or brand on each and every crate, and the buyer and consumer knows that every crate contains full count, and every egg just what it is represented to be. The general supply of eggs sell wholesale as common stock, at a price much below the price of fancy eggs, yet many of those may be just as good in every respect as the fancy stock, but the buyer has no guarantee, and buys them at a risk. There are many dealers who make a business of buying this common stock, and unpack them, candle them, clean them, and assort them into three grades, and realize a good profit. An experienced candler can tell strictly fresb eggs at a glance also preserved eggs, cold storage, stale eggs and every other grade. By sorting, grading and cleaning these promiscuous lots of country eggs, these dealers sell them under a guarantee, and consumers know exactly what they are buying. I have seen crates of this common stock sold at fifteen cents per dozen, and after they were candled, sorted and washed, sell at twenty, thirty and forty cents per dozen. Many of these eggs were strictly first class, but they were in bad company, and sold at the price of common stock in consequence. The price is fixed by the lowest grade in the lot, and the producer of the first class eggs received third or fourth class prices for them.

I have heard it said many times that if every one would produce first class eggs and first class butter, the market would be overstocked, or glutted, and the prices would all seek the lower level. This is absurd in the extreme. In the first place, everybody will not produce

first class goods, and in the next place, if everybody would produce first class eggs and butter, the consumption would be enough greater to consume the supply. The man who produces uniformly first class goods of any kind, always has the best class of customers, and realizes top prices for his wares. The man who produces low grade, shoddy goods soon sinks to the level of low grade, shoddy customers. This is true of every kind and character of merchantable commodities, and it is especially true of fruits, dairy products and eggs.

If the farmers of Virginia and the South generally, would grade their flocks of fowls so they would produce eggs uniform in size and color, and would feed for quality, then see that nothing but strictly fresh, clean eggs went to market, then ship to a first class market, and sell under a guarantee, Southern eggs would sell at top prices in a very sbort time. This month is a good time to read and think and study. There should be a greater feeling of unity among the farmers. There must be more co-operation in producing, in buying, in selling. There is no reason why we cannot produce as good eggs in Virginia as can be produced in New York, Massachusetts, or Rhode Island. Our hens lay them just as fresh, the eggs are just as large, the material is just the same, then wby not the price? Simply because we are too indifferent to give the business that care and attention necessary to get the eggs into the markets of the North in the condition that the trade demands. What are these conditions? First, we must grade our hens so that the eggs will be more uniform in size and color. Second, we must feed better. By this, I mean, we must feed a greater variety of grain, vegetables, meat, etc., to give the eggs body and color. Third, we must be careful to grade the eggs as to size and color of shells, and have them clean. Many people do not believe that this will make any difference in the price. Try it. Take, say five dozen nice, clean white or brown eggs, all clean and uniform in size, in one basket, and five dozen mixed colors and sizes and dirty and stained in another basket, and go into the market in any city, and see which lot will sell first, and for the highest price. Fourth, we must put them into market promptly, and, in an attractive way. Have your name or some brand on every package, and guarantee every egg in every package. When all this is done and continued for a short time, Southern eggs will sell at prices equal to any.

The same is true of poultry for table use. I have seen live poultry in coops in front of provision stores in Richmond, that for variety, equalled the colors of Joseph's coat. Old hens, blind hens, sick hens, lame hens, lean hens, hens with scaly legs, that looked as if they were wearing felt boots, lousy hens, big bens, little hens, hens of every color. Roosters, too. Lame, balt and blind. Veterans of many battles. Some with spurs large enough to make hunters' horns that would call to the chase all the hounds within many miles. I saw one old bumble-footed fellow that crowed lustily at the jollification parade when Cleveland was elected in 1884. Oh! Sbades.

of Delmonico! Table poultry? Is it any wonder that roosters sell at thirty cents, and hens at "two bits"? Is this picture overdrawn? Halt! Let them live a few months longer, and die of old age, rather than slay them in their dotage. A wise man said to me a few days ago, "I love ancient history, but not when it is covered with feathers. Please bring me a modern bird for Thanksgiving." Really, if we would buy some of these birds for table use, we could realize the truth of the old darky's remark about the one he picked in the "wee small hours," Dis am de rooster dat crowed when "Fore de Lawd! Peter denied his Marster." No, no! Give us something to tempt the palate; to please the eye; to enlarge the heart and open the purse. Give us fresh eggs without ice, and table poultry that is modern and toothsome, and the demand will be equal to the supply, and "Thy days shall be long in the land, and thy latter end be like his. CAL HUSSELMAN.

PRACTICAL PURE-BREDS vs. SHOW BIRDS. Editor Southern Planter:

The season of the poultry show is upon us, and our friends, the exhibitors, will soon be advertising their winnings. Some of your readers have asked me what I consider the best markings for a Barred Plymouth Rock bred for a prize winner. In reply, I wish to say that the Standard of perfection by which all judges are supposed to be bound, or guided, is the only official or recognized authority on this subject, and if the revising of the standard were wholly in my hands, I would not make many radical changes, except to recognize the fact that nature intended that in this breed, the males should be lighter in color than the females, and I would not give equal weight to surface color and under-color,, for I think the surface color, which determines the beauty of the bird, is of more importance than the under-color, which can only be seen when we have the bird in the hand, and open up the plumage with the fingers.

Now, it often happens that in applying the rules of the standard, and awarding prizes in the show room, the awards in the table poultry classes: the Rocks, Wyandottes, Reds, Brahmas, etc., do not go to the fowls which have the greatest excellence for practical purposes. Let me give a few illustrations:

In a certain well-advertised show which I attended, there was a long row of Barred Rock cockerels. Among them was one bird which I noted at once as a cull. Why he should be sent to a show I could not see. His bill was almost dark enough for a Wyandotte, and a distinct greenish tint showed all the way down the front of his legs. His outer color was dark also, and I knew that if dressed he would not show the golden skin for which the Plymouth Rocks are so justly prized. When the male bird shows so much dark color in his beak and legs, the skin is nearly always of a pale whitish, or nondescript color.

Well, when the judge came to score this bird, and the feathers were parted, it proved that the dark barring was more distinct down next to the skin than on the surface of the plumage. In fact, if each feather could have been pulled out and reversed, the bird would have been better in appearance than before. So, because the cockerel had rare strength in "under-color," and "under-color"

was in fashion, he won a place in the prize list; yet I am free to say that in my thirty-two years of experience with Barred Plymouth Rocks, I never have seen the time when I would be willing to keep that prize bird in my flock past the next killing day.

On this question of undercolor, the farmer should not be misled. By this term is meant the color on the lower part of each feather, the soft, downy portion. It is a well-known fact that practical men who are breeding Plymouth Rocks for market chickens, or for capons, select light males, which are entirely unsuited for show purposes. The very finest golden skin, and brightest yellow legs and beaks often; yes, usually go with an undercolor which is white or nearly white.

Another instance came to my attention last winter when the smallest Plymouth Rock hen in the line was awarded first prize at the Washington Show. She had considerable black in the beak, and the foundation color was more white than yellow. She also had dark spots or scales on her legs, but she had fine color points in plumage, and this usually wins the ribbon. There were in the same competition hens with pure golden beaks and legs, denoting much better market quality, and of larger size, and equally uniform and pleasing surface color, but they received no awards. I do not say that the judging is poor, but I do say that we, who are breeding table poultry for market, and to improve the stock of the country, must select our stock by a standard which differs somewhat from that which the best show room judges adopt. In other words, the breeder who has a long list of premiums to his credit, does not necessarily have the birds best suited to improve the flock of the practical breeder, who keeps thoroughbreds for use as well as for pleasure.

What I have said specifically of Plymouth Rocks applies to all our American breeds which have mixed coloring. It seems to me that table quality, which has done so much to make them popular, is too much ignored in the show room, and judges are too willing to forgive a little deficiency in size, when size is one of the vital characteristics of the breed.

Personally, I seldom care to breed from a male bird of my own breeding which will not weigh ten pounds at maturity, the full standard weight being nine and one-half pounds, and probably a large majority of Rocks now bred are falling below the standard, as there is a general tendency to sacrifice size for show rocm coloring.

The Progress of the Flock.

The past month has been one of heavy feeding and rather rapid growing with the 450 young Plymouth Rocks which we are raising. Pullets of our own breeding, hatched April 2d, began laying late in October. These are the only Rocks in this neighborhood which have laid this fall at less than seven months, so far as I have heard. The first pullets sired by males from the Maine Experiment Station are now seven months and three days old, and have not yet laid, but seem to be making preparations. Cockerels of this blood weighed seven and one-half pounds at seven months old. They are of fine table quality, are maturing with fair rapidity, and nearly all of them will be far larger than their sires, and with better markings. Cockerels whose colony house is so located

as to give mostly field range, are growing faster than those having chiefly woods range. It takes faith in the business to keep 100 cockerels and 300 pullets on full feed at present prices when they are yielding nothing in return. As we are aiming to keep this venture on a paying basis, we may have to sell 100 pullets, instead of wintering all, as we first planned.

The Selling Club.

The Southern Table-Poultry Club was mentioned in my last letter, but as my address was not given (through oversight) several inquiries reached me later. We are simply selling through one house, and binding ourselves to observe the rules of shipment on our distinctive Blue Label. No membership fees, nor salaries to pay. Each shipper helps to establish a reputation for all. We have as good facilities for selling as Washington affords, and are glad to co-operate with all shippers of first-class stock to this market. For Blue Labels address,

W. A. SHERMAN.

Vienna, Fairfax Co., Va.

POULTRY KEEPING ON A FARM.

Editor Southern Planter:

November 14th, with the snow eight inches deep and still snowing, I am going to give the readers of the Planter my experience in the poultry business. I have been raising poultry only four years, and will say I did not start in it for pleasure only, and I have not been disappointed. I am raising only two breeds, and I don't want any more, for I think they are the best. The Barred Plymouth Rocks and Single Comb Brown Leghorns were the breeds I decided upon at first, and I have never regretted my selection; as there are no two prettier or more interesting breeds of fowls grown to-day. For several years I have read with much interest accounts of large profits derived from producing eggs and young chickens for market; and describing the different modes of handling and caring for flocks, feeding, etc. Previous to 1908 I flept no record of expenses or receipts. But desiring to know if the large profits claimed to be made by writers in poultry papers could be realized, I decided to find out myself, and the results have been entirely satisfactory. The test was made on my farm of seventythree acres, under conditions as they exist, or could, at a small outlay, be made to exist on most of the farms of the State. The test began January 1, 1908, and is not completed yet, but I am so well satisfied that I want to give results before a new year begins, in the hope that it will help some one to start and make money out of their farm poultry. When the test began I started with fifty hens and fifty pullets. Fifty of each breed. I kept one yard of each kind entirely separate from each other to get my eggs from to set. The rest of the flock run together without any male birds with them. Now, I want to say I have to-day over 100 March, April and May pullets, and twenty-five old hens, besides some to eat. So, after selling what we have done, we still have twenty-five more than we started with. Now, I want to tell you the kind of houses I use. I built them myself, and am a great advocate of fresh air for healthy fowls. My houses face the southeast, on a good slope, so water can run away. Size of houses, twenty by twenty feet, four and a

half feet high in rear, seven and a half feet high in front. They have open fronts, covered with wire, and in severe weather I drop a curtain down over opening, and on real bleak nights use a curtain close to the roosts inside the house. In this way I never had a comb to freeze at any time last winter, although we had some real cold nights. I clean my houses about four times or more, if needed, a year, and use plenty of slaked lime to keep down odors and absorb moisture. I believe it very important to keep everything dry and plenty of dust in the poultry houses. Fowls are let out each day, after ten o'clock in the morning, in winter time, except on snowy, or very cold days. I kept my Leghorn pen up for one month at one time, and they seemed to lay better in close confinement than any other way. The pen consisted of twenty-one hens and one cock. They averaged fifteen eggs in January and February, and one day, when it was down to and below Zero, I got nineteen eggs from this pen. Can anyone beat that? For a winter ration, I feed mostly dry grain-wheat, corn and oats in straw; give them a bran mash three times a week, and keep some grain in deep litter all the time to keep them busy. At night I feed them whole corn just before going to roost. For green food, I feed cabbage, beets, potatoes, etc. Cook my potatoes and feed them hot with bran. Oyster shells are kept before them all the time. The question of keeping hens busy cannot be over-estimated; a lazy hen is good for nothing, but the table or market. Good dry quarters make hens happy, and we should see that they have such, if we want them to lay eggs this winter. They are now forty cents a dozen. Straw or leaves make a nice litter for a scratching shed, and no house is complete without some preparation of this kind in winter. Give plenty of warm water, or the dish water from the kitchen, and milk occasionally. I sold all my hens down to fifty in May, while prices were good to make room for my young stock.

I hatch most of my chickens in incubators, and raise them in brooders and with hens. This way we get all our chickens out by May 1st, and they all grow to maturity about the same time. Now, one word about incubators: Buy the best at any price, and you will find them cheapest in the long run. I ran a medium price machine twice, and I sent it back, and you could not give it back to me as a gift, since using the ones I have now. I never got a fifty per cent. hatch out of it. While I get from eighty-five to ninety-three per cent. hatch out of ones I have now. If any of your readers care to know what kind of machines I am using, I will write and tell or help them in any way I can. I did not start hatching very early last spring but want to commence this season the first of February.

Now, a word about feeding young chickens. Take them out of incubators or from the hens in the evening, when they are thirty-six hours old, and put them in brooders, or with hens in their coops, and feed them next morning when they are forty-eight hours old. I never feed anything but dry feed to little ones from the first, as I have found they do much better when fed this way. Give them a little water in a chick fountain. Will tell you more about feeding a little later. All feed was raised

(Continued on page 1087.)

The Horse.

NOTES.

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

Mr. Winston's Fine Trotters.

Of all Virginians that I recall, certainly among those bred here and to the manor born, not one has shown greater aptitude as a student of blood lines and pedigrees than James O. Winston, who has ever been loyal to the trotting horse. As senior member of the big contracting firm of Winston & Company, with offices at Richmond, Va., and Kingston, N. Y., Mr. Winston is a very busy man, though his trotters furnish a lot of healthful diversion, and, for an amateur, he can team a fast horse to a rousing good finish either on the track or road. With the contract awarded less than twelve months since, and the work now well under way, the Winston Brothers, James O. and Thomas S., who make up the firm, assumed a mammoth undertaking, one representing more than thirteen millions, in building the Ashokan Reservoir, which will furnish the water supply for New York City, some eighty miles distant. This is one of the world's largest contracts; in fact, being second to only one other yet awarded, something to be proud of by these two clever Virginians who have essayed to carry out the specifications. Mr. Winston and family now reside at Kingston, but the works are at Brown Station, same ten miles distant, while his horses are quartered at the Kingston Driving Park, with Thomas Dolphin in charge. Dolphin was formerly one of Allie Trout's assistants at Maplehurst Farm, near Boston, where the famous sire, Baron Wilkes, ruled as premier for years.

At Kingston Driving Park.

The Kingston Driving Park is right near town, and Dolphin occupies the main training barn, with some ten or twelve horses, all of them trotters, of which Sahib, 2:23%, the brown stallion, 6, by Bingen, 2.06%, out of Lady Ethylwyn, by Jack Daw, 2:281/4, is probably the best known horse in the stable. One of the best individuals among the sons of his far-famed sire, Sahib came to his speed early, as at two years he could better than 2:20 speed, while he worked a mile in 2:18 at three, one in 2:14 at four, and his record was made at five, with a trial in around 2:14.

This season the brown stallion trained off and when he rounded to no attempt was made to give him fast work. Sons of Bingen are proving wonderfully successful in the stud and the get of Sahib seem already to indicate what may be expected of Lady Ethylwyn's son as a sire, though so far he has only four foals, two of which are yearlings and the others only weanlings. Of this lot ,all bred and owned by Mr. Winston, the yearling colt, out of Mabel S., by Ashland Wilkes is now an impressive looking youngster, full fifteen hands high, who, with little else than mere breaking, worked eighths quite handily around 18 seconds, a 2:24 gait; in fact, on a cold, windy day in November I saw Dolphin work

with Miss Caleta, 2:2934, who, with Mr. Winston up, had to be driven out to finish on even terms with her This colt is known as Sinbad at the infantile rival. track, while the other yearling is a bay filly, called Sceptre and her dam is Script, by The Bondsman, second dam Luzelle, 2:151/4, one of the best three-year-olds of her year, by Patron, 2:141/4, from Rachel Ray, a great brood mare, by Overstreet Wilkes. A black filly, by Oakland Baron, 2:091/4 out of Miss Caleta, 2:293/4, is another good yearling bred by Mr. Winston and he thinks well of her, too, as she trotted eighths in 17% seconds this fall. This filly looks much like Lady Gail Hamilton, 2:061/4, the fastest daughter of Oakland Baron. The two weanlings in Dolphin's stable are both fillies, and by Sahib, one a bay, from Mabel S., and the other a brown. out of Script. All of these youngsters, well bred, are entered in The Horseman, The American Horse Breeder, The Kentucky Futurity, and other rich colt stakes.

Choice Brood Mares in the Winston Stud.

Mabel S., a good looking roan, ten years old, by Ashland Wilkes, dam Mattie Swope, 2:30, by Young Jim; Script, stoutly made bay, of five years, by The Bondsman, dam Luzelle, 2:151/4, and Miss Caleta, a brown, ten years old, by Bingen, dam Caleta, by Advertiser, 2:151/4, make a choice trio of brood mares. Mabel S. and Script are with foal by Sahib, while Mss Caleta was bred to Guy Axworthy, 2:08%, one of the fastest and handsomest sons of Axworthy, 2:151/2, the sire of great trotters like Hamburg Belle, 2:04%, and General Watts, 2:06%, world's champion three-year-old. Miss Caleta is a fine roadster, as with speed she combines rare good manners and few daughters of her famous sire are more attractive in appearance. Dolphin marked this daughter of Bingen at Poughkeepsie during the summer meeting there, while her daughter, Lady Caleta, by that wonderful sire of early speed, Peter the Great, 2:071/4, trotted to a record of 2:151/4. The five-year-old gray mares, Margaret J., by Kyrillie, 2:141/4, son of Kremlin, 2:073/4, dam Salvage, by Maztlan, 2:26%, and Toyah, by Peter the Great, dam La Jolla dam of Binjolla, 2:1734, by Advertiser, from famous old Sally Benton, 2:131/4, the champion four-yearold of 1883, and she out of the wonderful Palo Alto brood mare Sontag Mohawk, dam of eight, among them Conductor, 2:14¼, grand sire of Walnut Hall, 1, 3, 2:08¾, are being driven to pole. Both mares were mated in the spring with Sahib, though Toyah missed, but Margaret J. is plainly with foal.

Alice B. in Kentucky.

Alice B., 2:231/2, the bay mare, 8, by Idolita, 2:091/4, out of Wilbooka, 2:1914, by Wilkes Boy, 2:2414, is now in the stable of Ed. Benyon, at Lexington, Ky. This bloodlike, elegant daughter of Idolita has lightning speed at the trot, as she has shown better than a two-minute clip, but she will probably be bred to Peter the Great in the spring, and later become a member of the court this sturdy, well-made colt nearly that fast in company of Sahib, son of Bingen and Lady Ethlywynn.

HOW COLTS THRIVE IN VIRGINIA.

Editor Southern Planter:

I send you a clipping from The Breeders' Gazette of October 28th:

"Your inquirer, W. H. McK., asks if 760 pounds is a good weight for a colt at seven months of age. It is. I have a Percheron stallion colt which, at foaling time, weighed 270 pounds, at one month, 330 pounds, at two months, 400, and at four months, 615 pounds. I have also a filly which, at three months, weighed 435, and at five months, 635 pounds. Is not 270 pounds a very great weight for a foal at birth?"

Now, I don't know what our colts weighed at birth, but I am quite satisfied that it would have taken all but two of them to equal this 270 pounds. I don't want any 270 pounds in mine; but as we don't weigh them that young, cannot positively state the weight at birth. One of our stud colts at three months tipped the beam at 500 pounds; at five months, 700 pounds, and at six months, 780 pounds. The small gain of this last month may be accounted for by the fact of weaning.

A filly at two and a half months weighed 464 pounds; at four and a half months, 670 pounds, and at five and a half months, 760 pounds. It is rather interesting to note the gradual closing up of the distance between her and her mate.

The smallest colt we have got, at five months, weighed 610 pounds, and the next one to it, 650 pounds at the same age of five months. As these two colts came in the last two days in May, they caught a remarkably sultry time to get away, and in my experience great heat is worse than moderate cold for a very young foal. I don't know whether our friend of the clipping was more favorably placed in the season or not. Giving it to him, we can carry the odds and then win.

These colts had a few oats and some bran from the time they would eat. And their mothers some oats from the time the pastures got bare. The pasture was just plain, ordinary, every-day Virginia broom sedge. And there is no use disguising the fact that it is broom sedge we've got, but we are trying for better. From these results on broom sedge, we feel encouraged to expect something pretty good when we get blue grass for the mares and their progeny.

F. M. McCLOY.

Albemarle Co., Va.

THE HORSE MARKETS.

Eaitor Southern Planter:

I send the following views of the horse commission salesmen on the Chicago markets, which may prove of interest to your readers.

Newgass, who handles about 25,000 horses a year, said: "I have a large retail trade in heavy horses which demands the best type of Percheron, and will have no other breed," and that seventy-five per cent. of the draft horses sold by him to the trade were Percherons. Mr. Jacob Koehler, who is one of the largest dealers in the Chicago market, said: "There are only two kinds of horses which farmers can breed that will be sure to make them money, good Percherons and smooth, stylish-acting coach horses.

There is only one draft horse for this country, and that is the Percheron."

Messrs. Blain & Evans, large operators in horses, who were very extensively engaged in importing Clydes and Shires, said "the best selling horses on the market were grade Percherons. F. J. Berry, who has handled as many as 27,000 horses in a year, said: "For a draft horse, the Percheron is the horse. Our cities all want them in preference to any other breed." Colonel J. S. Cooper, one of the largest dealers in the United States, said: "For drafters the Percherons are the best of all breeds, and in our circulars we recommend the use of stallions of this breed."

I bring to my backing men whose business it is to keep posted, and whose years of experience in handling the Percheron on commission, should have given them the knowledge that they impart to their customers, and the public at large. It is a case of the dealers, not the breeders, whose opinions deserve weight, as they sell only on commission.

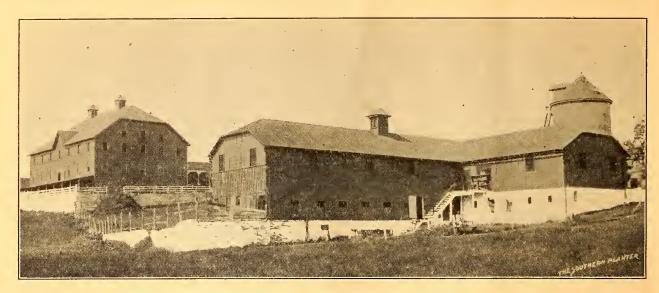
JOHN F. LEWIS.

Rockingham Co., Va.

We have never questioned the conclusion that the Percheron was a draft horse for city work, nor that he is in demand all the time for this purpose. Our point has been that for a work horse on the farm the Suffolk Punch is a better fitted, more tractable animal, with an intuitive predilection for farm work, derived from long years of use for this purpose, and, therefore, is what we need in Virginia on the farm to take the place of the light-limbed animals which are no use in handling the heavy modern agricultural machinery, which must be used if we are to compete successfully in the production of crops. From these heavier Suffolk mares grade Percherons can be bred which will meet the need of city buyers as above stated, and they will give us mules of size and weight for farm and city work.—Ed.

We have published statements of weights achieved by draft-bred colts owned by subscribers. A tyro in the business wants to know how it is all done. Have mares of draft blood-the more the better-mate them with the best draft stallions available, feed the mares liberally during pregnancy, and after the foals come give the youngsters all they will eat as soon as they will eat it. Oats with the husks sieved out, or, in fact, oatmeal, should be the first food given the colt as soon as he will nibble at it. This will probably be at from four to five weeks of age. Thereafter he should have just what he will clean up, and in two or three weeks a trifle of bran may be added. As the colt grows along to be nine or ten weeks old he may have the oats crushed, and about a fifth of the weight of the total ration in bran. It is only a very little that he will eat, but it will make a marvelous difference in his growth and condition. Then when the dry and dusty days of August come along, and the pasture is bare and brown, he should have some green corn in order that he may not lack for succulence. When he is well accustomed to eat grain and at about the age of five months he may be weaned, and what little milk he was getting from his dam at that time will make small difference to him .-Breeders' Gazette.

Miscellaneous.



THE MAIN BARNS AND SILO, STATE FARM, LASSITER, VA.

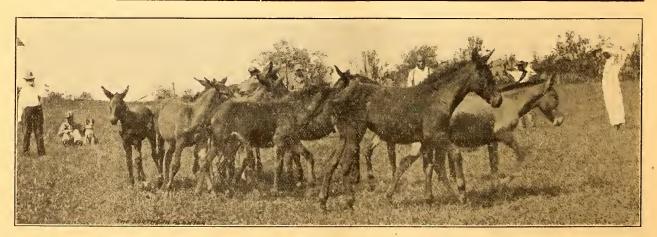
THE STATE (PRISON) FARM.

Several years ago, in order to relieve the congestion in the State Prison, also to provide a more healthful and sanitary place for convicts in poor health, the State Legislature authorized the purchase of a farm in Goochland county, about thirty miles from Richmond. The land purchased consists of considerably over 1,000 acres, and was a part of the estate of the late General Joseph R. Anderson. The farm, which consists of low grounds, second low grounds and high land, lays well for easy cultivation, with pretty nearly any kind of machinery. At that time the farm was pretty well worn, but by careful and intelligent handling, the Superintendent, Hon. T. J. Davis, has brought the greater part of it up to a high state of cultivation, as evidenced by the splendid crops he is growing from year to year. He usually has in his

tions. Not all of the above number of men are available for work, as the aged, crippled, maimed and tuberculous have to be deducted; thus his working force is not so large as appears at first sight. The farm has been well cleaned up, drained and ditched, and suitable buildings erected for both men and stock.

A general view of the barns and silo is shown at the head of this article. Since this photograph was taken, the space between the two barns has been covered, and is now used to house the dairy cattle, numbering about eighty head. A splendid result of the use of this shed as a cow shelter is, that tuberculosis has been entirely gotten rid of. The entire dairy herd is, therefore, in an absolutely healthy condition.

state of cultivation, as evidenced by the splendid crops. The silo is solid concrete, with a capacity of 300 tons, he is growing from year to year. He usually has in his and is a model of its kind. It is practically indestructible,



A BUNCH OF YOUNG MULES, STATE FARM, LASSITER, VA.

charge from 200 to 300 men, so he is able to carry on and should last for centuries. It is needless to say that quite extensive farming, canning and quarrying opera- it keeps the silage in splendid shape, and by its use, Mr.

Davis can economically and handily furnish his stock with plenty of succulent feed throughout the winter.

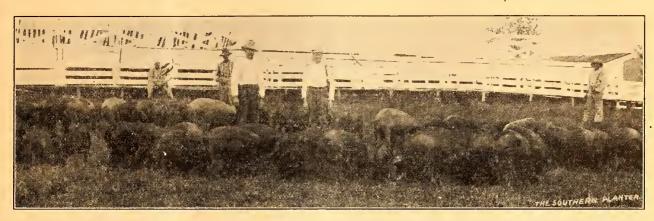
There is plenty of room for hay in the enormous barn shown at the left. There needs to be plenty of room for the storing of this crop, as 370 tons of first class hay was saved during the past season.

Another profitable and extensive venture of Superintendent Davis was the planting of eighty-five acres in tomatoes from which \$12,000 worth of canned goods were sold last year. All of the work in connection with the canning is done on the place, and a strictly first class article is put up. Indeed, we are informed that the de-

Duroc boars at an early date. Practically all the pork raised is consumed on the place.

Where such large farming operations are undertaken there is, of course, the problem of teams. Mr. Davis has found it more profitable to raise mules than to buy them, and in consequence has on hand at present some twenty-nine head of unbroken mules. In the very near future he will, therefore, have all the teams he wants. The farm owns its own jack.

There is another source of revenue to the farm, and which, by the way, finds plenty of work when the men are not otherwise engaged, and that is a rock quarry. mand quite exceeds the supply at profitable figures, and Mr. Davis has had installed a rock crusher of great capa-



SOME HOME-MADE PORK, STATE FARM, LASSITER, VA.

thus a tidy sum is realized, and naturally applied to the great expense of feeding, clothing and guarding the prisoners.

Another interesting crop this season was 185 acres of about the best corn ever seen in the James River Valley. We have not yet been informed as to the yield, but from reports, it must have been highly satisfactory.

Where there are so many men to feed, the meat problem is naturally a serious one. Mr. Davis has, however, successfully solved it with a herd of some 200 head of hogs of Duroc-Berkshire cross. At present he is using Berkshire boars, but will, in all probability, change to

city, which he has set in front of about a quarter of a mile of solid rock, which is crushed and ground into ballast and sold to the railways in enormous quantities. Perhaps some of our county supervisors may be able to persuade Mr. Davis to sell them some of this valuable road-making material. He has an inexhaustible supply of rock, and it may be that after a while he will be soliciting orders.

We congratulate Mr. Davis on his capable management and the good results he is showing in all the departments of his work. We are quite sure that the Prison Board will concur in these sentiments.

FARMERS' WINTER COURSE OF LECTURES AND DEMONSTRATIONS AT THE AGRICULTURAL AND MECHANICAL COLLEGE, BLACKS-BURG, VIRGINIA.

In the winter of 1907-1908, the Virginia Agricultural and Mechanical College offered for the first time to the farmers of the State a short course in agriculture and kindred subjects. The results were satisfactory in every way. Farmers representing twenty-two counties in the State were present, and expressed enthusiastic satisfaction with the work given. This course will be repeated, and lectures and demonstration work will begin Tuesday, January 12th, and continue for four weeks, closing February 10th.

As stated, the course will consist of lectures and demon strations—the lectures being given in the morning, and demonstrations of stock-judging, dairy practice, farm

machinery, silo and ensilage machinery, pruning, spraying, etc., in the afternoon.

No entrance examinations required. All are welcome, regardless of age or education.

Subjects of the Short Course.-1, Agricultural Chemistry and Fertilizers. 2, Soils and Maintenance of Fertility. 3. Farm Crops and Rotation. 4. Farm Machinery and Implements. 5. Farm Management and Book-keeping. 6. Principles of Seed Selection. 7. Stock Breeding and Feeding. 8. Stock Judging and Treatment. 9. Silos and Ensilage Machinery. 10. Dairy Principles and Practice. 11. Water Supply on the Farm. 12. Land Measurement and Leveling. 13. Poultry Breeding and Feeding. 14. Fruit Growing and Marketing. 14. Insect Pests and Plant Diseases.

While all are advised to take the full course, it will be seen that the above list of subjects can be grouped into

General Agriculture, Animal Husbandry, Dairying, and Horticulture. While not accurately divided, it may be stated that, roughly speaking, General Agriculture will be given the first week, Animal Husbandry the second, Dairy Husbandry the third, and Horticulture the fourth. In addition to the practical instruction given during the day, one or more illustrated lectures on popular subjects will be given at night during each week of the course.

While all of the foregoing courses are popular, rather than technical, in their presentation, sufficient laboratory instruction is given to enable any intelligent dairyman to acquire reasonable accuracy in making a test for butterfat, and to enable any farmer to test his soils for acidity, and his farm seeds, etc., for viability and purity.

Expenses.

The expenses of the farmer for this winter course of four weeks may be estimated as follows:

Tuition	Free.
Board, per week	\$3 00
Heat, light and laundry, per week	1 25
Matriculation, for course	1 00

The rooms will be furnished without charge with single iron bedsteads. The bedding must be brought from home, and should include pillows, sheets, blankets, and, if possible, a single mattress. Where mattresses cannot be brought from home, they can be rented here, but the charge for three weeks' rental will be twenty-five cents. No text-books required.

Tickets should be bought over the Norfolk and Western to Christiansburg, from which point a short railroad line of eight miles runs to Blacksburg. Farmers upon arrival should report at once at the President's office, where, after registering, quarters will be assigned. Farmer students will not be subject to the usual college discipline, but are expected to conform to the program adopted for this course, and to act as law-abiding citizens.

Farmers can board at the hotel, or with private parties in the town where desired. We have maide provision in the agricultural building for approximately 100, and any one who wishes a place reserved there, at the above rates, will please write in advance to

DR. P. B. BARRINGER, President.

Blacksburg, Va.

We commend this subject to the attention of our readers. Either go yourself or send your sons. The cost will be repaid a thousandfold.—Ed.

MEETING OF COMMISSIONERS OF AGRICULTURE.

The Southern States Association of Commissioners of Agriculture and other agricultural workers held its tenth annual meeting in Nashville, Tennessee, October 20-22.

There was a very good attendance at the meeting, indeed, nearly all of the States were well represented. There were from Virginia, Mr. G. W. Koiner, Commissioner of Agriculture; Dr. E. W. Magruder, State Chemist; Mr. B. L. Purcell, Deputy Dairy and Food Commissioner; Mr. J. Rice Smith and Mr. F. B. Carpenter, both of the Virginia-Carolina Chemical Company.

The program, an excellent one, was as follows:

Address of Welcome—Governor Malcolm R. Patterson, Tennessee.

Response to Address of Welcome—Commissioner W. A. Graham, North Carolina.

Report of Committee on Uniform Pure Food and Feed Laws.

Address—President of the Association, T. G. Hudson, Georgia.

Subjects for Discussion.

- 1. Reports of Work in the Several Departments of Agriculture during the past year, including Improvements in Old Lines and the Additional New Ones during the present year—Commissioners of Agriculture of Alabama, Arkansas, Georgia, Florida, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia.
- 2. The Needs of Agriculture in the South—E. J. Watson, Commissioner of Agriculture, South Carolina.
- 3. The Management of a Two-Horse Southern Farm— J. N. Harper, Director Experiment Station, South Carolina.
- 4. Uniform Regulations for the Enforcement of Feed Laws—E. W. Magruder, Department of Agriculture, Virginia.
- 5. Uniform Regulations for the Enforcement of Food Laws—Benjamin L. Purcell, Department of Agriculture, Virginia.

Discussion of above two subjects—R. E. Rose, State Chemist, Florida.

- 6. Uniform Laws for Stock-Feeds and Condimental Foods—B. W. Kilgore and C. D. Harris, Department of Agriculture, North Carolina.
- 7. Progress in the Execution of Food and Stock Feet Laws—R. E. Stallings, Georgia; W. F. Hand, Mississippi; R. E. Rose, Florida; C. A. Moores, Tennessee.
- 8. Progress Made in Tick Eradication—W. P. Ellenberger, United States Department of Agriculture, Washington, D. C.

Discussions by Tait Butler, North Carolina; H. A. Morgan, Tennessee; C. A. Carey, Alabama.

- 9. Results of Demonstration Work—D. N. Barrow, Clemson College, South Carolina.
- 10. Immigration—G. W. Koiner, Commissioner of Agriculture, Virginia.
- 11. Demonstration Work in South Carolina—Ira Williams, United States Department of Agriculture, Washington, D C.
- 12. The Use of Winter Legumes—C. L. Goodrich, United States Department of Agriculture, Washington, D. C.
- 13. Conserving the Resources of the Commonwealth—A. M. Soule, University of Georgia, Athens, Ga.
- 14. The Possibility of the Production of Industrial Alcohol in the Southern States—B. B. Ross, Experiment Station, Alabama.
- 15. Local Agricultural, Horticultural and Live Stock Organizations—H. E. Blakeslee, Commissioner of Agriculture, Mississippi.
- 16. The Menace of the Creamery Promoters in the South—C. L. Willoughby, Experiment Station, Georgia.
- 17. The Duty of a State in Regard to Forestry—Alfred Ackerman, University of Georgia, Athens, G.
- 18. The Farmers' Relation to the Prosperity of a State—J. Rice Smith, Virginia.

19. Fertilizer Control Laws-J. T. Welch, Louisville,

20. New Laws Needed in the South-J. A. Wilkinson, Commissioner of Agriculture, Alabama.

21. Address-John Thompson, Commissioner of Agriculture. Tennessee. On some subject relating to the work of his Department.

The papers on food and feeds were the most interesting, and brought forth most discussion. The Standing Committee on Uniform Food Laws presented draft of a uniform stock feed law, which was agreed to by all of the States represented, and the Association will endeavor to have this enacted into law as soon as possible. A uniform law for stock feeds for all of the Southern States will be a great step in advance.

The City of Nashville and its good people entertained the Association most lavishly, giving them a smoker, a trip to The Hermitage, "Old Hickory" Jackson's old home, and a trolley ride around the city. The meeting was a most helpful and profitable one to all in attendance.

The officers for the ensuing year are:

President-H. E. Blakesley, Commissioner of Agriculture, Mississippi.

First Vice-President-Captain R. E. Rose, State Chemist, Florida.

Second Vice-President-John Thompson, Commissioner of Agriculture, Tennessee.

Secretary-Treasurer-B. W. Kilgore, State Chemist, North Carolina.

Assistant Secretary-Treasurer-E. W. Magruder, State Chemist, Virginia.

The Association will meet next year in Mississippi.

THE FARMERS' CLUB.

Editor Southern Planter:

The writer has always appreciated the value of farmers' clubs, or agricultural societies, but special attention was called to their value by the recent Farmers' Institute, and it really is to be regretted that some able person who had the experience and advantage of being a member of a local club was not called upon to give us an address, or at least to open the ball in a discussion of this valuable topic.

Agricutural clubs, either county or more local, are of very great value in disseminating information, increasing the genuine sociability of the neighborhood, assisting their members in the more profitable conduct of farm and live stock affairs, and in developing agriculture generally. These local associations would be quite as valuable in the course of the year as Farmers' Institutes. There exist now several of such local clubs in the State of Virginia. The writer has had the pleasure of attending the meetings of several of such clubs and taking part in the proceedings.

There is such an organization known as the "Black Lick Farmers' Club," located in Wythe county, but not a county association. In fact, it is rather an exclusive one and consists of but ten or twelve families, the heads of the families being the members. It is the intention of this club to be limited to an even twelve families. The meetings occur once a month, and the annual program

held at the home of each family. From the neat little program it is evident that each member has a name for his place and that the meetings are changed from one place to another by turns. In March, for example, the the meeting is held at Laurel Glen, the home of W. G. Howe; in June it is held at Willow Lawn, the home of Peter W. Hounshell. In their little booklet one page is devoted to each meeting, with the name of the month boldly at the top, place of meeting following, title of paper to be read, by whom, discussion, and for afternoon two or three topics to be taken up. One topic may interest the gentlemen exclusively and another be discussed by the ladies.

The preamble to the Constitution of this little club is of particular interest and reads as follows:

"Desiring to promote good fellowship and neighborly feeling, of securing our mutual improvement in mind and morals, of seeking the best methods in husbandry and housewifery, and helping on that good time 'when our garners shall be full, affording all manner of store, and our sons shall be as plants grown up in their youth, and our daughters may be as cornerstones polished after the similitude of a palace,' we, the undersigned, do form ourselves into an association known as the Black Lick Farmers' Club, and for our government do adopt the following Constitution and By-Laws."

Another idea of a club comes from one that we know of that is broader and yet limited in its membership, as fol-

"Any one actively engaged or materially interested in farming shall be eligible to membership. Applications shall be endorsed by the Executive Committee, and an unanimous vote of the members present at any meeting shall be necessary to election. Membership shall be limited to fifty."

The object of this -Farmers' Club in their Constitution reads as follows:

"The object of this club shall be to bring together enterprising young men actively engaged or materially interested in farming, for the purpose of exchanging ideas, securing the more profitable production of farm products, and developing the agricultural resources of the State."

This club has annual dues to the amount of five dollars. If the membership is kept full there would be an annual income of \$250 per year. If this club should meet once a month it could easily have a good speaker each time. Frequently the speakers would not cost the amount of \$5.00 in expenses, and when some other speaker, whose expenses would be greater, was desired, more money could be used. Members from the Experiment Station staff and from the Agricultural College of Virginia (V. P. I.) would be glad to discuss various subjects for such clubs, and the outlay for their services would only amount to their expenses.

The writer recalls an agricultural club in Yorkshire, England, which he had the pleasure of visiting twice. This club consisted of fifty members, each paying one pound (\$5.) annual dues, which was expended in procuring the services of a professor of agriculture who met with them one evening every week, gave them a lecture, and discussed the same with the club. Frequently the subshows the arrangement to be that one meeting is to be ject extended over two or three meetings, and at other

times a subject was taken up and finished at one meeting. The value secured to every member of such a club is inestimable. The profit arising from the many valuable things learned and used in his business affairs would many times repay the outlay of five dollars dues. The interest such a club would build up in each and every member in his own affairs, would also be of great value. A club that employs regular speakers or meets for the discussion of various subjects could perhaps better meet at some central point where a hall, schoolhouse or church could be secured. In a club consisting of from twenty-five to fifty members there would unquestionably be many specialists, such as breeders of different lines of live stock, poultry fanciers, apiarists, and others, who would take up special subjects in their turn and discuss them fully. There should always be three or four members selected who are especially interested in the topic to be discussed, that they might prepare themselves especially for the occasion and bring out the important features of the subject in the discussion.

The remark of a farmer that such clubs always end in dissension, misunderstandings, or in one or two wishing to run the whole thing, causes me to make the suggestion that it is well to provide in the constitution and by-laws for a change of all officers at the annual election, and it is doubtless advantageous to have some limitations in order to give long-winded brethren an opportunity to

sit down. In the by-laws of one club there is this provision: "Members may not occupy more than ten minutes on essay or discussion, and shall confine themselves to the topics under discussion, which shall have to do with husbandry or housewifery, and should avoid altogether the vexed questions of politics and theology." It is also provided that "the refreshments shall be plain and simple, and the invitations to the meetings of the club shall be limited to the hostess of the day." This applies to the club of twelve families which visits the various homes in turn. It should certainly be the object of every member of such a club to carefully avoid assuming too much authority, taking more than his share of the time and honors, but, on the other hand, to endeavor to do his part in every particular. Each member of such a club should unselfishly endeavor to give his best efforts for the success of the club, and not only its general upbuildinfi, but the strengthening and benefitting of every individual The adoption of the following motto would member. insure peace, harmony and good will throughout the membership of such a club:

"There is so much good about the worst of us, And so much bad about the best of us, That it behooves none of us To talk about the rest of us." WALTER J. QUICK, Agricultural College, Blacksburg, Va. Prof. of Animal Husbandry.



THE "LECTURE ROOM" CAR CROWDED WITH INTERESTED FARMERS

THE BETTER FARMING SPECIAL -STOCK FEATURE.

Editor Southern Planter:

TRAIN—LIVE | Western Railway over its lines, for which speakers were provided from the Virginia Polytechnic Institute, exhibited interest and appreciation of an exceptional nature in the The farmers who visited the special train run in their talks on live stock and the advantages of diversification interest from November 3d to 13th by the Norfolk & in farming. Hundreds of questions were asked and undi-

vided attention was given to every phase of the many ideas offered along animal husbandry lines and advice given for improving agricultural conditions, the fertility of the land, and better financial returns, by the adoption of stock farming and a suitable rotation of crops.

At many stops the time was so limited for each speaker that no subject could be fully covered this being especially true from a live stock point of view.

The specific questions of breeds, crosses, grading up, live stock management, feeding, care and handling for market could only be touched upon incidentally. But enough was said to arouse such an interest as to cause the farmers to follow up with questions, conversations after the talks, requests for the Experiment Station Bulletins on live stock, feeding, etc.

It is a great advantage to have animals on exhibition for illustration. A breeder of Holsteins and a dairyman at Farmville placed the writer under many obligations by having one of his fine cows, in full flow of milk, at the train. Many questions of practical importance were asked by the farmers as we used the animal as an object lesson in our talk.

short course for farmers this winter continuing four weeks, beginning January 10th.

The limited and unsatisfactory amount of information to be given in the short train talks may be quite fully understood when I state that a dozen or fifteen lectures of an hour each are required in the winter short course. The course is so scheduled and the different subjects are grouped so as to permit farmers who are unable to be away from their farms more than a week or ten days to select the lectures they desire to hear-in horticulture, agronomy, fertilizers, animal husbandry, etc.—to attend at the time such lectures are to be given.

Many expressions of satisfaction in the "Traveling Agricultural College," were heard from those who visited the exhibition car, secured literature along lines in which they were most interested and listened to the lectures in the auditorium cars. Many compliments were passed on the management of the train by Mr. F. H. LaBaume, Agricultural Agent of the Norfolk & Western Railway; also, upon the speakers, though some of the latter compliments, as might have been expected, were rather of a left-hand character, and a few adverse criticism were not The impossibility of discussing in detail the many vital withheld by the critics until they were beyond hearing.



THE BETTER FARMING TRAIN INTERESTS THE SCHOOL GIRLS.

questions pertaining to live stock in a thirty or forty One of these, after he had listened three minutes, said, expressed their hope of attending the V. P. I. winter withdrew: "That man can't learn me nothin'." Mr. Fer-

minute talk was so evident that all farmers seemed to as he backed out of the car: "I know mor'n that feller appreciate the disadvantage and many at every stop can learn me in a week." Another remarked, as he guson, so well and favorably known, and who heard the last remark, wittily said, loud enough for all to hear who had heard the remark: "That man told the truth," which was heartily endorsed as evidenced by the laughter. This occurred at Farmville, where we were greeted by our largest, most intelligent and appreciative audience, and by continuous visitors until the shades of night prevented. At night Dr. Fletcher's lecture was well attended in the auditorium of the Normal School by a delighted audience, who were evidently deeply interested in civic betterment, the lecturer's theme being appropriately and forcibly illustrated by stereopticon pictures of "before and after."

Reverting to our subject, the farmers everywhere agreed with the writer, many with significant nods of the head, that Southern agriculture has suffered terribly from the one crop system, want of rotation, and diversified farming, with horses, cattle, swine and sheep as the four corner-stones of successful agriculture.

In every section of the world where one crop is the money crop the lands soon deteriorate and must sooner or later be abandoned as unproductive. The advantages of the use of the crops produced in rotation for developing or fattening live stock or producing dairy products was fully discussed with the farmers and, in certain sections, the dairy husbandry question, building up the dairy herd, breeding, feeding, care and management, being most interesting to and desired by the farmers, received the major part of our time. As we have indicated, nothing can add to the interest in these particular subjects like a few animals, both good and poor specimens, from a dairy herd. We want to recommend that since so much interest seems to attach to object lessons in lecture work, whether it be lantern pictures, animals or apparatus, that the visits of an agricultural train would be additionally advantageous and that the crowds would be larger with greater interest if a local committee was formed whose business it would be to secure for the half day's Farmers' Institute specimens of live stock, etc., to be used by the speakers for the enlightenment of the hearers. This committee would greatly assist in advertising the event, and might increase the interest and attendance, as was accomplished at Brookneal by a perfectly grand and thoroughly satisfying farmers' dinner, served in a tobacco warehouse by the attractive wives and beautiful daughters of the farmers. Such arrangements would cause all to look forward with greater pleasure to the return next year of the Better Farming Special Train.

V. P. I., Blacksburg, Va. WALTER J. QUICK,
Prof. Animal Husbandry.

RESULTS OF DEMONSTRATION WORK.

There was held at the hospitable home and farm of W. H. Dorin, Mount Laurel, Va., on Friday, November 13th, a meeting of the Farmers' Co-Operative Demonstration Workers, and some forty or fifty farmers gathered to see a demonstration of deep plowing and subsoiling. A special agent of the Agricultural Department was present, and talked on several subjects, among them deep plowing, subsoiling, liming and seed corn.

At noon a light luncheon was served, and afterwards the farmers went to the field, and saw the plowing and subsoiling, The farmers agreed it was necessary to prepare a deep and thoroughly pulverized seed bed, well drained; to break in the fall to a depth of eight, ten, or twelve inches, according to the soil, with implements that will not bring too much of the subsoil to the surface.

The demonstration plainly showed a depth of at least eight inches by turning plow, and ten to twelve inches more by the subsoil plow.

The presence of heat, air and moisture is essential to chemical and germ action in the preparation of plant food in the soil. The depths to which these penetrate the soil depend upon the depth of the plowing, provided the soil is well drained.

Mr. T. Stephen Canada, of this county (Halifax), was induced to try this method of preparation for corn, and after applying one ton of lime per acre, and 500 pounds of pure raw bone meal, on land that had previously produced but twenty-five to thirty bushels per acre, this year gathered seventy-two bushels per acre, nearly 300 per cent. increase. Mr. Canada received the first prize of \$25.00, offered for the largest production per acre.

Another prosperous farmer, Mr. R. T. Edwards, tried the same method, and increased his yield from some twenty to twenty-five bushels to sixty odd bushels per acre, and fully demonstrated to his mind the advisability of deep plowing, subsoiling and liming. Mr. Edwards received the second prize for large production.

In the Farmers' Co-Operative Demonstration Work great stress is laid upon a more thorough preparation of the soil in the autumn, because in our Southern climate the frosts do not penetrate the soils sufficiently to open them and admit air. We must, therefore, do by plowing in the fall and by some winter cultivation what nature does in the colder North.

In the richest soils there is but little food ready prepared for the plant, and nature's plan is that this food shall be prepared more or less daily by the action of the air, the moisture in the soil, and the sun.

These three active forces cause the food to be prepared so that the plant can be properly nourished. This cannot be done without plowing and cultivating, to admit air, and the earlier this work is commenced in the fall the greater the effect it will have upon the crop the following season.

The effect of using good seed is not sufficiently appreciated, nor perhaps is it understood just what makes good seed. It must be the best variety, carefully selected early in the fall, and stored in a dry place.

The judicious use of commercial fertilizer is one of the most important matters in modern agriculture, for it furnishes plant food directly and indirectly to the young plants.

The most important factor relating to the permanent fertility of the soil is the abundant and judicious use of all the animal and vegetable matter that may be found on every farm.

It is to be hoped that every farmer reading this article will 'try to plow and subsoil at least two acres this fall and follow the Agricultural Department's suggestion, and thus show the possibility of raising Virginia's average from twenty to sixty or seventy bushels per acre.

THE

Southern Planter

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

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 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 T RICHMOND, VA., AS SECOND-AS SECOND-CLASS MAIL MATTER.



PUBLISHERS' NOTES.

TO ADVERTISERS.

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

A NEAT BINDER.

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

WHOSE MONEY?

On August 21st we received \$1.00 in one of our return envelopes, postmarked, Painters, Va., without any name or address attached. We are, of course, unable to give the sender

BACK NUMBER WANTED.

We will be very much obliged to anyone who will let us have a copy. of the Southern Planter for March, 1907. Drop us a postal before sending it and we will remit for it. A perfect and clean copy is desired.

WITH THE ADVERTISERS.

The Fern Hill Poultry Farm starts the season's advertising this month. J. Wallace Snelling, Prop., is a top notch breeder all the time.

Morrill & Morley are advertising their Eclipse Spray Pump in another

The Evelyn Heights Farm is an addition to the ranks of poultry advertisers this month.

Blatchford's Calf Meal is advertised by S. T. Beveridge & Co.

Poultrymen will doubtless be interested in the advertisement of C. H. Dickinson, Luray, Va.

The old established seed house of J. M. Thorburn & Co. has an attractive announcement on another page.

The forthcoming Herndon Poultry Show is advertised in this number. Write A. H. Kirk, Secy., for catalogue.

Four very fine horses are offered by Mrs. G. M. West, Vinita, Va.

Dr. F. E. Williams, Ivy, Va., is offering some finely bred Berkshire boars at reasonable prices.

The great Richmond Poultry Show has an announcement on another page.

Poultry Supplies.

If you want eggs during the winter, you must feed Animal Foods, such as

Meat Meal. Beef Scraps, Blood Meal, Bone Meal.

to take the place of the insects, worms, etc., which poultry get in summer. OYSTER SHELLS and GRIT are also prime necessities ...

Write for Prices and Catalogue telling what to use for Success and Profit with Poultry.

T.W. Wood & Sons, Seedsmen, RICHMOND, - VIRGINIA.

We carry complete stocks of Cyphers'
Incubators and Brooders, Poultry
Foods, Egg Producers, Lice and
Insect Powders, Poultry
Remedies, etc.

Helpful Catalogue mailed free.



GUARANTEED 10 YEARS

And has all the up-to-date improvements that every lady appreciates. It is splendidly huilt of thoroughly dependable material and handsomely finished. Has elegant Oak Drop Leaf 5-Drawer Cabinet, complete Set of Attachments, full instructions how to use them, and the outfit will be sent you "Freight Free" on

DAYS FREE TRIAL



We sell DIRECT at ONE PROFIT, saving you the Jobher's, itetailer's and Agent's profits and sell-ing expenses, & exactly the same machine they will ask you \$30.00 for. Send at ONCE for OUR BIG NEW FREE

SEWING MACHINE CATALOGUE

CATALOGUE

Most complete and instructive book of its character ever published in the South. It pictures and describes every part and particular of the greatest line of positively High-Grade Sewing Machines ever offered. We are the largest Sewing Machine distributors in the South, and, at prices asked, for quality guaranteed, our Machines are unmatchable. This catalogue describes and prices high-grade Pianos, Organs, Steel Ranges, Cooking Stoves, Heating Stoves, Phonographs, Dinner and Tollet Sets. Prompt shipments, safe delivery and satisfaction guaranteed, or your money back.

MALSBY, SHIPP & CO.,

Dept. 14 41 S. Forsyth Street, ATLANTA, GEORCIA

CAPITAL, \$1,000,000 00.

SURPLUS, \$475,000.06

Special attention paid to out-of-town accounts. Correspondence invited.

Three per cent. Interest Allowed In Savings Department. Compounded Semi-Annually,

Main and Ninth Streets.

Southern **Farmers**

are beginning to realize the wonderful advantage to be gained by dairying.

1st. It benefits the soil and increases its

2nd. It insures a sure and steady income.

The most successful dairymen

Tubular Separators

because of their simplicity, durability and efficiency.

The Tubular appeals to Southern farmers because it fulfills, easily and well, the conditions prevailing in the South, especially where inexperienced help is employed.

The Tubular has been proven the ideal separator for the South -it stood the test right in your locality.

Catalogue 290 tells why. Write for it-sent free.

THE SHARPLES SEPARATOR CO., West Chester, Penna,

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

Send your name to W. R. Todd, Sec'y, for a catalogue.

"After the Christmas Dinner," a very breezy little book suitable for a Holiday remembrance, is advertised by the Atwell Co.

Rhode Island Reds, good ones, can be had of L. E. Smith, Appomattox,

The printers "pied" a line in the Wyandotte ad. of R. O. Berger last issue. See corrected ad. this month.

Myer & Son, Bridgeville, Del., are offering Angus cattle and Hackney horses at exceedingly fair prices.

Note the change in the advertisement of the Biltmore Farms on another page.

James M. Hobbs is offering some special bargains in both White Holland and Mammoth Bronze Turkeys.

Some very nice young Hereford Bulls can be had of H. A. S. Hamilton & Sons.

The Standard-Bred Poultry Farms have an attractive announcement on another page. Their several breeds are kept on separate farms.

The Rockford Engine Works have an ad, in another column to which attention is asked.

The Cable Co. has a prominent advertisement on another page. Pianos, Organs, etc., of the highest quality are offered on easy terms for the home, school, church and public halls.

H. J. & C. G. Sanger have some poultry bargains announced on another page.

The Raney Canner Co. is offering its well known canning outfits and your attention is invited to the advertisement.

L. D. Kline is offering Mammoth Bronze Turkeys and Fekin Ducks, which he says are the best he has ever had on his farm.

A fertilizer Mixer is advertised by "B," at Box 197, Wilmington, N. C.

The Studebaker wagon is attractively advertised elsewhere in this issue.

We call attention to the advertisement of Deere & Co. This well known house makes a most popular line of farm implements.

Sashes, doors and blinds at bargain prices are offered by the Gordon Van Tine Co.

The Aermotor Co. has a striking advertisement in another column.

Harrison's Nurseries start the season's advertising this month.

J. J. H. Gregory & Son are advertising their old established seed business this month.

The Rochester Spray Pump Co. has a card in another column of interest to fruit growers.





THE AMERICAN WELL WORKS Aurora, III., U. S. A.

Branch Offices:

Chicago, Ill., First National Bank Building. New York, N. Y., 2-4 Stone St. San Francisco, Cal., 305 Market St. New Orleans, La., J. H. Menge & Co. Dallas, Texas. Joplin, Mo.



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



Folding Sawing Mach. Co., 158 E. Harrison St., Chicago, IL

95 Buys This Large Handsome Nickel Trimmed Steel Range

without warming closet or reservoir. With high warm ing closet, perceian fined reservoir, just as shown in cut, \$17.35; large, square, oven, wonderful baker, 6 cook-ing holes, hody made of cold rolled steel.Duplex grate; hurns wood or coal. Handsome nickel trimmings, highly polished.

OUR TERMS the OUR TERMS are the most liberal ever made. You can pay after you receive the range. You can pay after you receive the range. You can take it into your home, the higgest bargain you ever saw equal to stoves return it to us. We will pay freight both ways.

Write Today for our beautifully illustrated Stove Catalog No. \$221; a postal card will do.

150 styles to select from. Don't buy until yon get it.

WARVIN SMITTERON

MARVIN SMITH CO., CHICAGO, ILL.

National Field and Hog Fence



REVOLVING BARB WIRE

The barb special states of the state of the states OeKalb Fonce Co., DoKalb, III- Kansas City, Mo.

Fertilize and Plant With a



or One Horse

This is the most practical—simple and "Decre Durable" one-horse Corn Drill made, Investigate before buying any planter by writing a postal for our new 1908 Free Book, "Gorn—More and Better," which illustrates and describes this implement. Comes with or without Fertilizer Attachment shown above. Can also be furnished with pea attachment, planting peas and corn at one operation. Feed is positive, distributing fertilizer in almost any condition, without waste, up to 450 pounds per acre. Seed drop is the famous Deere Edge Selection, known to be obsciutely accurate.

Wrile a Posial in Deere and

Write a Postal to Deere and Get Your Name On Our

FREE Mailing List

The day we get your name and address on postal or by letter we send you our atest Free Books—and keep sending you valuable information Free about values and farm machinery improvements, if you write us. Keep posted by writing us. Find out now all about this New Deere Drill by sending for our

FREE BOOK

"CORN — More and Better"
To know point for point how to compare all farm machinery and get best value, ask for our Free Corn beok and New Deere Drill book No. 41

Deere & Mansur Co. Moline, Ill.

ONE MAN DOES WORK OF TWO

HIRED With Iron Age Riding Cultivators. You can do it easier and No. 82 Pivot Wheel. A new

BATEMAN MFG. CO., Box 167C, Grenloch, N.J.

Implements Save PLANET JR. you money,

S. L. Allen & Co., Box 1107X, Phila-

Sloan's Liniment, well known to hundreds of our readers, is advertised on another page.

The Bateman Mfg. Co., makers of the celebrated Iron Age implements, have several advertisements in this is-

Deere & Mansur Co. have an advertisement on this page which should interest our readers.

POULTRY KEEPING ON A FARM.

(Continued from page 1075.) on farm, except bran, grit and a few powders. All eggs and chickens were sold to merchants at wholesale prices. Lowest price received per dozen for eggs, twelve and a half cents; highest, twenty-eight cents. Price for young chickens, thirty-five cents a pound; lowest, ten cents a pound. I think the record a fairly good one, and one that can be made on any farm.

Will say to the readers of the Planter that I won first premium on wheat at the State Fair, in Richmond, which was \$5.00 for best peck of any variety, grown by exhibitor. Will tell you later how I am running my farm.

Below is a statement of eggs and poultry sold and expenses: Amount received for eggs sold

in ten and a half months.. \$ 64 07 Value of eggs used for table.. 12 00 Amount received for hens sold Amount received for young chicks sold 92 10 Value of hens and young 20 50

chicks eaten Total\$218 67 Expenses. 40 bushels corn at 50c....\$ 20 00 20 Bushels wheat at \$1.00.. 20 00 30 Bushels oats at 40c.... 12 00 1000 Lbs. bran (\$20.00 per

ton) Oyster shells 2 00 Flaxseed meal, etc..... 3 00

Total\$ 67 00

Leaving a profit of.....\$151 67 Or a little over \$1.51½ per hen. WM. F. COYNER, JR. Augusta Co., Va.

Franklin Co., Tenn., Oct. 6, 1908. I bought a Galloway Wagon Box Manure Spreader last spring. It does good work, and I am well pleased with it. I tried it in all kinds of manure, and it gave satisfaction in every respect. Do not see how I could do without it. All who see it work are well pleased with it. It is all O. K.

W. H. RICH.

Brunswick Co., Va., Mar. 13, 1908. I like the Southern Planter and do not wish to miss an issue. J. W. BAILEY, Jr.

WHAT DO YOU SAY? the best investment they ever made was when they bought an

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. Bend for our catalogue and save money.

ELECTRIC WHEEL CO., Box 140 . Quinoy, 88.

Sale of the State of the State



Steel Wheels
will make your old farm wagon
as good as new. Save money because they never need repairs. Book
Write for big free book telling
All about them and how they pay. Free
Empire Mig. Co. Hox 140 AG, Quiney, Ill.



Wheels, Freight Paid \$8 75 for 4 bings; Wheels, Steel lives on. With Rubber Tiros, § 15.20. I mig, wheels § to 4 in tread, Rubber Tiro Tip Magnes, \$1, Harness, \$5. Write for catalog, Learn how to buy discort, Repair Wheels, \$5.50, Magnet Rubberts her REE, W.V., Sood, Clasimonth.

FARMERS ATTENTION

Mix your own

FERTILIZERS

and save money.

We make the only practical home mixer on the market. Will pay for itself first season. Write for circu-

B -Box 197. Wilmington, N. C.

ENGINES FOR SALE.

Ten horse traction \$250; 10 horse portable, \$150; 12 horse portable, \$200; 6 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 stock for immediate shipment. Casey Boiler Works, Springfield, Ohio.

Rockford Engine Works, Dept. 35, Rockford, Ill.
The Engine that will please you Before you contract or buy write for our proposition

Neat-Nobby-Handy. All Styles 3 to 30 h. p.

Make Your Own Fertilizes







Write for them. A few bushels of corn at present prices buys it and it's good for many years' work. It saves a fifth to a third of the feed.

No Money in Advance

Sold on a real free trial. Keep it if it works to your satisfaction. That's my safe plan for you. Grinds anything and does it fast and easy. Send for FREE catalogue now, to

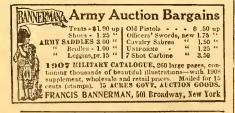
G. M. DITTO, BOX 48, JOLIET, ILLINOIS



DEHORNING ISN'T GRUEI

It may be with a saw, but not so when the when the
KEYSTONE DEHORNER
is used. It cuts from four sides at
once; makes a sliding, sharp shear
cut. Any stock-raiser can do it
easily. No crushing or splintering
of horns or tearing of flesh. Done
in 2 minutes. Send for free booklet.
M. I. Phillips, Box 47, Pomerov, Pa,





we pay 500 a month salary BIGLER COMPANY, X378; SPRINGFIELD, ILLINOIS.

UNFAIR COMPETITION.

Several Mail Order Houses, advertisers of ours, have called our attention to some very reprehensible methods by which they are being attacked by a class of merchants, principally in the West. It seems that these merchants have organized themselves into associations, whose principle business seems to be nosing around railroad stations and hunting for shipments consigned to some local farmer from one of these Mail Order concerns. Then they take the farmer in hand and undertake to dictate to him where he shall spend his money and otherwise browbeat and bulldoze him into "keeping his money at home." One of the favorite methods is to get some of their tribe to order goods on approval and then reject them, thereby inflicting a great deal of loss and trouble on the shipper. Another method is to get a few hundred of their henchmen to write for the enormous catalogues and file a list of articles alleged to be wanted for quotations, without the slightest idea of spending a cent. In other words, they do pretty nearly everything to harass these houses and make farmers buy locally, except advertise in their local papers, hustle for the business, offer high-grade goods at low prices or accommodating terms or treat him fairly and squarely. The whole performance is a species of "Night Riding" which ought to be broken up. We have always considered firms like The Chicago House-Wrecking Co., and Montgomery Ward & Co. of Chicago a great bulwark between the farmers of the country and high prices.

AGRICULTURAL LIME.

T. C. Andrews & Co., of Norfolk, Va. have just completed several large Lime Kilns and will manufacture all grades of Agricultural Limes. Attention is called to their ad, in this issue,

A PLACE FOR JEREMIAH.

A certain prosy preacher recently gave an endless discourse on the prophets. First he dwelt at length on the minor prophets. At last he finished them, and the congregation gave a sigh of relief. He took a long breath and continued:

"Now, I shall proceed to the major prophets."

After the major prophets had received more than ample attention the congregation gave another sigh of re-

"Now, that I have finished with the minor prophets and the major prophets, what about Jeremiah? Where is Jeremiah's place?"

At this point a tall man arose in the back of the church. "Jeremiah can have my place," he said, "I am going home.

BARGAINS IN

2nd Hand Machinery.

THE WATT PLOW COMPANY, Richmond, Va.

- 1-15 H. P. (8x10 cylinder) Pitts Engine and boiler. Mounted on Steel
- 1-8 H. P. Geiser Engine and Boiler on wheels in first-class condition.
- 1-10 H. P. Geiser Engine and Boiler on wheels. In fine condition.
- -12 H. P. Geiser Engine and Boiler on wheels in good condition,
- 1-12 H. P. Ames Engine and Boiler on wheels.
- 1-20 H. P. Geiser Engine and Boiler on wheels in first class condition.
- -No 2 American Saw Mill with saw and belts as good as new.
- 1—No. 1 Lane Saw Mill with 52-inch saw, all beits. One swing cut off Both in good order.
- -4-inch, 4-sided Molder.
- -22-inch Planer, Matcher and Moid-der complete with countershaft and pulleys.

We invite your correspondence and will giadly give any information de-

THE WATT PLOW CO..

1426 E. Main St., Richmond, Va,





Steam, Gasoline and Water Power Planers, Shingie Milis and Corn Mills. WE PAY THE FREIGHT.

Send for Catalogue. DeLoach Mill Mfg. Co., Bridgeport, Ala. Box 265



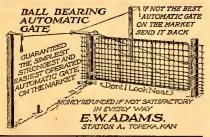
GILSON MFG. CO. 476 Park St. Port Washington, Wis.

ANNOUNCEMENT OF

This is the Quarter - Centennial or "Jubilee Year" of Page Fence. To celebrate the twenty-five years' triumph of the Pioneer Woven Wire Fence, we are preparing a "Jubilee Edition" of the Page Fence Catalog for free distribution. It is the most interesting, unique and valuable Fence Book ever printed. It tells the story of Page success, from the first fence sold to the present time, when over 800,000 progressive farmers own and praise Page Fence. Gives the reasons for the use of Page Fence by the Government as the highest standard of quality. Handsomely illustrated, Filled with important Fence facts. Send today. Its FREE.

Page Woven Wire Fence Co. Box 51C Adrian, Mich.





THE NEW CENTURY GATE

(An be opened or closed from Can be opened or closed from your wagon by small child.
No springs, no hinges, no cast ings, no cog-wheels, no wood, and advantage of drawing. So sim-

lings, no cog-wheels, no wood, no saging, no draging. So simple, so easy, no harness and almost no machinery; nothing to wear out or break, nothing to be getting out of fix. Not affected by dritting or deep snow, sleet or ice. Always ready for use and will last a life-time. A model of simplicity, durability and cheapness. If there is no Agent in your locality, please write New Century Steel, Wire & Iron Works. 602 S. REGISTER ST.

ALWAYS IN ORDER



Automatic Gate Saves time, adds to value, safety, beauty and pleas-ure of home.

MANLOVE



Please mention the Southern Planter

REPORTS.

S. Department of Agriculture, Washington, D. C. Bureau of Biological Survey. Circular 52. Directions for Destroying Pocket Gophers.

Bureau of Chemistry. Bull. 114. Meat Extracts and Similar Preparations.

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Forest Service Circular, 152. The analyses of Turpentine by fractional distillation with steam.

Forest Service, Circular 157. A primer of Conservation.

Forest Service. Circular 135. Chestnut oak in the Southern Appalchians.

Forest Service. Circular 139. primer of wood preservation. Circular 151. The preservative treatment of Loblolly pine cross

Circular 154. Native and planted timber of Iowa.

Bureau of Plant Industry, Circular 12. Dry land grasses.

Office of Public Roads, Bulletin 34. Dust Preventatives.

Bureau of Plant Industry. Circular 15. The Fertilizing Value of Hairy Vetch for Connecticut Tobacco Fields.

Bureau of Statistics. Circular 17. Government Crop Reports: Their Value, Scope and Preparation.

Bulletin, 333. Farmers' Cotton Belt.

armers' Bulletin, 334. Experiment Station Work, XLVIII.
Plant Breeding on the Farm; Farmers' Sorghum for Silage. The Keeping of Apples; Forage Crops for Pigs; Profitable and Unprofitable Cows; Blackhead in Turkeys. Farmers' Bulletin, 335. Harm

Harmful and Beneficial Manuals of the Arid Interior.

Farmers' Bulletin, 338. Macadamized Roads.

329. Experiment Farmers' Bull. Station Work-Improvement of Sandy Soils. Hogging off Corn,etc. Farmers Bull. 336. Game laws of 1908.

Bureau of Agriculture, Department of the Interior, Government of the Phillippine Islands. The Phillippine Agricultural Review, Vol. I., Nos. 6, 6, 7.

Arizona Experiment Station, Tuczon, Ariz. Bulletin 57. Timely Hints for Farmers.

Circular 74. Timely Hints for farmers on Sheep farming.

California Experiment Station, Berkeley, Cal. Bulletin 195. The California Grape Root worm.

Bulletin 196. Eucatyptus in California. Grape Culture in Bulletin 197.

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BLACK MOTOR **Buggies for Service**

Get our interesting "Black Motor Buggy" Book about the only motor buggies that are good city or country road "mudders" and "hill climbers" and built for practical use. No jarring—No blowups on tires—Speed 2 to 25 miles an hour—Run 30 miles on one gallon of gasoline—Safe—Reliable—Especially equipped for professional use—10 horse power—"Get there" and "back again" every trip, and save time, worry and expense. Right prices and terms. Write for Book A-221

BLACK MFG. CO. 124 E. Ohio St. Chicago, Illa



U.S.W. FIELD and HOG FENCE

Highest quality-superior lock-easily rected-strong-low priced.

Write us, stating what you can use and RANGER HUMANE we will name you special delivered price.

RANGER & HUMANE | We make the largest line of poultry, lawn and field fencing in the country.

UNION FENCE CO. DoKalb, Illinois Kansas City, Missouri



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



Are you tired of mending your roof?

Genasco Ready Roofing

is made of Trinidad Lake Asphalt and gives you long years of service. Doesn't dry-out, crack, pulverize, rot, nor rust. Saves you trouble, time, and money.

A written guarantee with every roll, backed by a thirty-two million dollar

Mineral or smooth surface. Ask any dealer, and stick for Genasco. Look for the trade-mark. Write for Book 62 and samples.

THE BARBER ASPHALT PAVING COMPANY

Largest producers of asphalt, and largest manufacturers of ready roofing in the world. PHILADELPHIA

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Tell the advertiser where you saw his advertisement.

California; Improved Methods of

Making Wine.
Bulletin 198. The Grape Leap-hop-

California Experiment Station, Berkeley, Cal. Circular 39. Instruction in Practical Agriculture at

the University Farm, Davis, Cal. Cornell Experiment Station, Ithaca, N. Y. Bulletin 254. Drainage in New York.

Bulletin 255. Bean Anthracnose. Colorado Experiment Station, Fort Collins, Col. Bulletin 131.

senical Poisoning of Fruit Trees. Idaho Experiment Station, Moscow, Idaho. Bulletin 64. Planting Ap-

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Press Bulletin No. 15. Information
Concerning Alaska Wheat.

Kansas State Board of Agriculture, Topeka, Kan. Report for Quarter ending September, 1908. Profitable Poultry.

Kansas Experiment Station, Manhattan, Kan. Bulletin 155. Alfalfa. Press Bulletin 163 Hessian Fly.

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Bulletin 111. Rotation Experiments with Cotton, Corn, Cowpeas, and Oats!

Liaryland Experiment Station, College Park, Md. Bulletin 129. los and Silage in Maryland.

Bulletin 130. Nurseries and Nursery Inspection.

Maryland State Horticultural Society, C. P. Close, Secy., College Park, Md. Public Meetings and Schedule of Premiums.

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North Carolina Experiment Station, West Raleigh, N. C. Bulletin 198. Handling and Marketing of Milk and Cream.

New York Experiment Station, Geneva, N. Y. Bulletin 303. Inspection of Feeding Stuffs.

Experiment State College, Pa. Bulletin 87. Some Poultry Experiments.

Purdue Experiment Station, Lafayette, Ind. Newspaper Bulletin 145. Results of Variety Tests of Winter Wheat.

Island Experiment Station, Kingston, R. I. Bulletin 128. A SHIP ME YOUR

OLD METALS

HIDES

RUBBER

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Car Lots a Specialty

50,000 Hides Wanted

> Write for Prices. Satisfaction Guaranteed No Commissions.

CHECKS SENT SAME DAY FREIGHT BILLS ARE MARKED PAID.

Clarence Cosby,

Established 1890.

RICHMOND, VA.

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

REFERENCES:

National Bank of Virgin a Bank of Richmond. Bradstreets and Dun



WE ARE EXPORIERS.

You don't experiment or donate a profit to a half-dozen middlemen when shipping to us. We pay the best prices for Mink, Lynx, Skunk, Coon, Otter, Fox, Muskrat and all other Raw Furs. We are an old and reliable house (Est. 1872) in this the largest, quickest and best Raw Fur market in the U. S. or Canada. We remit promptly—positively free of any commission.

FREE also list of Traps and Trappers' supplies, tags, etc.; also learn how you can get absolutely FREE, any one of our Five handsomely bound Trappers' Guides.

BUY A BOSS FEED MILL



and save 1-3 of

of your grain.
They will grind
faster, pull lighter wear longer than other mill any other manufactured.

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Sold on a guarantee, 10 days
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Manufactured by
J. C. WOODCOCK & CO.,
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Litchfield, Ills.



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.

Catalogue. Write to-day.

CYCLE HATCHER

Bex 409, Electrical Research Processing 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.



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.

Slightly used Steinways; 1909 Model Lyon & Healys; and other remarkable Bargains. Lyon & Healy, 80 Adams St., Chicago.

World's Largest Music House Our Great Re-Building Sale is Now in Progress!

Further Study of Soil Treatment in Greenhouse Culture.

Experiments With Bulletin 129. Feldspathic Rock as a Source of Potassium.

Bulletin 130. Analyses of Commercial Fertilizer.

Bulletin 131. Further Soil Tests in Paraffined Wire Baskets.

South Dakota Experiment Station, Brookings, S. D. Bulletin 109. Rusts of Cereals and other Plants.

South Carolina Experiment Station, Clemson College, S. C. Bulletin 138. Analyses of Commercial Fertilizers.

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Bulletin 108. Winter Bur Clover. Texas Experiment Station, College Station, Tex. Bulletin 107. Commercial Fertilizers and Poisonous Insecticides in 1907-8.

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Fourth Annual Report of the Henry Phipps Institute for the Study Treatment and Prevention of Tuberculosis. Philadelphia, Pa.

Wisconsin Experiment Station, Madison, Wis. Bulletin 167. The University Dairy Herd-Management and Records. 1907-8.

TRAINING STRAWBERRY RUN-NERS.

The most common error made by the beginner in Strawberry growing is that of securing an "over-stand" of plants. Believing that the amount of fruit from a certain area will be in proportion to the number of plants and blossoms thereon, plants are frequently set close when starting the bed and the late runners brushed along by the cultivator instead of being removed. The area necessary for the full development of one plant is often occupied by three to five plants, which,, having a greater number of leaves, evaporate more soil moisture and after the first picking produce only small, inferior berries, often having hard, undeveloped tips. Hand thinning of plants is not advised, neither is it necessary, as a proper stand may be secured by spacing the plants when setting according to the growth and later training the runners to vacant spaces when hoeing and cutting off the late runners which extend into th Growers' Journal. the walks.-Market

This Christmas

Your Desire

Can Be Realized

Catch the spirit of the season and make up your mind now to write us at once, get acquainted with the prices, terms and the superior quality of our line of

PIANOS ORGANS

Don't let this Christmas pass without taking advantage of the Special Holiday Bargains We Are Extending to Our Customers.

If you want a PIANO or ORGAN FOR

The Church, The School, The Home

you will make a mistake not to write us. We have a most Complete stock.

Mason & Hamlin and Chicago Cottage Organs and the Famous Cable Line of Pianos.

No matter how much or how little you want to spend, we can give you the very best values for the money.

We are Southern !Teadquarters for the Victor Talking Machine and Records.

Mail Orders given quick attention.

THE CABLE CO.,

213 East Broad, Richmond, Va.

J. G. CORLEY, Gen'l Mgr.

Remarkable Discovery That Cuts Down the Cost of Paint Seventy-Five Per Cent.

A Free Trial Package is Mailed to Everyone Who Writes.

A. L. Rice, a prominent manufacturer of Adams, N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powdrpaint. It comes in the form of a dry powder and all that is required is cold water to make a paint weather proof, fire proof and as durable as oil paint. It adheres to any surface, wood, stone or brick, spreads and looks like oil paint and costs about one-fourth as looks like oil paint and costs about one-fourth as

write to Mr. A. L. Rice, Manuf'r., 2 North St., Adams, N. Y., and he will send you a free trial package, also color card and full informa-tion showing you how you can save a good many dollars. Write to-day.



Time to Paint

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

Liebermuth Bros. Richmond, Va.



Write for prices.



A Great Discovery. DROPSY CURED with vege-CURED with vegetable remedies; removes all symptom 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, testi-monials and free

trial treatment DR. H. H. GREI Atlanta, Ga.

Please mention the Southern Planter

NEW OFFER ON FEED MILLS.

Those who will need a grinding mill this season will be glad to learn that the Quaker City Grinding Mills, which have been so popular for over forty years, will be sold direct from the factory at manufacturer's prices this year. Having been sold through dealers heretofore, the change in policy will mean a material reduction in prices. Yet Quaker City Mills are better than ever this year, having new improvements for which patents are still pending. Besides, these mills will now be sent out on 10 days free trial to all responsible men. Another attractive feature of this new policy is to accept six months bankable notes instead of cash, as an accommodation when wanted. All this will mean more business than ever for this firm. and they are ready for it, having recently enlarged their plant and increased facilities in every way. They have still further increased the number of styles and sizes of the Quaker City mill also, until now, no matter what a man may want in the way of a grinder he will find that one of the Quaker City Family just meets the requirements, in style, size and price. The great demand for these mills is due to the fact that each has a wide range of usefullness, is easy to adjust for whatever grade of feed, meal or flour is desired, is extremely light running, so that large capacity is possible with little power. The forty-second annual catalog just issued by the Straub Co. is a splendid book, containing descriptions and illustrations of the various mills which makes every feature perfectly clear, and enables a man to pick out the mill suited to his needs without any trouble whatever. It also contains a good article on "The Profit In Grinding Grain for Stock." Those who think of buying a grinder should write for this book and investigate this liberal direct-from-factory offer. Address your requests to The Straub Co., 3739 Filbert St., West Philadelphia, Pa. Just mention the fact that you noticed this comment and would like to have more information.

The buyers of apples seem inclined to wait until growers are disposed to part with their fruit at lower prices than they now ask. There is a fairly good crop in eastern states this year and the quality in most cases is fine. Growers think they should realize nearly as good prices as last year, when the quality was much inferior to that of the 1908 crop. On the other hand,, buyers believe that there is not enough storage room to accommodate all of the large crop and so they are content to wait.

At the market the call for nice red apples is good, but the tone of the trade in general is more nearly quiet than active.

AGRICULTURAL

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 particulars.

T. C. ANDREWS & CO., Inc.

NORFOLK,

VA.

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.



CATTLE INSTRUMENTS
are "Easy to Use," no veterinary
experience necessary. A tew dollars invested in our goods will save
hundreds of dollars. Pilling Milk Fever
Outfit for Air treatment recommended by
U. S. Agricultural Dept., price \$3.00. Silver Milk
Tubes Soc: Teat Slitter \$1.50; Garget Outfit \$4.00;
Capon Tools, Horse and Cattle Syringes, all sent prepaid with full directions. Write for free Booklet, 2a
G. P. PILLING & SON CO. Arch \$1. Philadelphin. 1.

CAN BE CURED. My mild, soothing, guaranteed cure does it and FREE SAMPLE proves it. STOPS THE ITCHING and cures to stay. WRITE NOW-TODAY.

Dr. Canaday, 354 Park Sq., Sedalia, Mo.

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

Trappers----Fur Traders

Ship your Furs direct to the World's Ship your Furs direct to the World's largest Fur market, where prices are always highest. Write for our latest Price List, giving highest prices for Furs and Pelts of all kinds from all sections. It's FREE.

MYERS-BOYD COMMISSION CO.,
St. Louis, Mo.

Tell the advertiser where you saw his advertisement.



maintain a MAIL ORDER DEPART-MENT in charge of a man skilled in the line of interpreting orders by mail, with over 20 YEARS' EXPERIENCE in catering to the tastes and needs of our OUT-OF-TOWN CUSTOMERS. Our system of measurements is so simple that it's an easy matter to order; and we send goods anywhere on approval, which enables you to satisfy yourself fit, quality and pattern before PAYING A PENNY ON THEM.

C, A word from you will bring our NEW, HAND-SOMELY ILLUSTRATED STYLE BOOK to your address, together with SAMPLES of many of our leading patterns in Suits; tape measure, etc. State whether MEN or BOYS' samples are wanted. CEVERY GARMENT STRICTLY GUARAN-

I, We handle the FINEST CLOTHES made in America, yet our prices are VERY LOW when you consider the quality.

MEN'S SUITS, \$12.50 Up. BOYS' SUITS, \$3.50 Up. BOYS' WASH SUITS, . . 95 cts. Up.

C.CLERICAL GARMENTS a Specialty.

O.H.BERRY&CO. THE SOUTH'S LARGEST C CLOTHIERY

RICHMOND,



GET THE BEST

A'Good Spray Pump earns big profits and lasts for years

THE ECLIPSE

A OHBERE

is a good pump. As practical fruit growers we were using the common sprayers in our own orchards—found their defects and then invented The Eclipse. Its success practically forced us into manufacturing on a large scale. You take no chances. We have done all the experi-

menting. Large fully illustrated Catalogue and

Treatise on Spraying—Free.

MORRILL & MORLEY,
Benton Harbor, Mich.



Defender Sprayer

All brass, easiest work-All brass, easiest work-ing, most powerful, auto-matic mixer, expansion valves, double strainer. Catalogue of Pumps and Treatise on Spraying free. AGENTS WANTED. J. F. Gaylord, Box 82 Catakill, N. Y.

SENT FREE-A PRACTICAL BOOK-LET THAT EVERY FARMER NEEDS.

Just Write to the American Harrow Company, Detroit, Mich, for Your Copy. Their free book on fertilization is

chock full of dollar-making facts and ideas. Unless you already have one of their free booklets on the "Care, Value and Application of Manure" and their 1909 American Manure Spreader Catalogue, it will be worth your while to write for them at once.

The Catalogue fully describes the famous American Manure Spreader, a machine that has stood the hardest of tests and proved its durability and dependability in all kinds of work, and under all kinds of conditions. It is the result of over twenty-five years of broad manufacturer's experience, and its many exclusive features are, every one of them, practical improvements.

The book on the care of manure gives information that will be of value to any farmer, whether he spreads manure by hand or with a machine, and it costs you nothing.

The American Spreader will pay for itself in a year or two, according to how much it is used, and it would save you a lot of hard, disagreeable work. One man and an American will do as much as three men and two wagons spreading manure in the old way-and do it better.

The American Manure Spreader is sold direct from the factory to your farm on a full month's approval test -on cash or on time payments-and is fully guaranteed.

The Detroit Tongueless Disc Harrow made by the same company is the greatest modern improvement in harrows. Doing away with the tongue, and providing a forward truck does away with all threshing of the tongue between the horses, side-draft and neck-weights, things which put a horse out of commission just at the season when you need him most. You can turn shorter with the Detroit Tongueless and every horse does his share of bringing the machine about.

On this machine, you may also have an extra attachment, a Transport Truck, on which the machine can be mounted and transported from one place to another. This saves the machine when going over stony or sandy roads, bridges, etc.

The Detroit Tongueless Disc is sold direct to you at factory prices on thirty days' free trial. Catalogue is free; send for it to-day, and tell them whether you want a Spreader or Disc Catalogue or both, and be sure to mention this paper.

Address the American Harrow Company, 628 Hastings St., Detroit, Mich.

Always mention The Southern Planter when writing advertisers.

"SUNSHINE" SPRAYER

Do You Spray Your TREES, VINEYARDS, PLANTS and VEGETABLES?



Fig. 825-Pump with automatic agitator and two spray leads.

Spraying is a necessity-To spray properly a good Pump is a necessity.

Our "Sunshine" Sprayer is, we claim, the only durable, heavy, first-class Sprayer that can be bought at a price within the reach of small fruit growers.

Write us for full descriptive circulars and prices.

The Crestline Mfg. Co. CRESTLINE PUMP WORKS

> Crestline, Ohio. **ESTABLISHED 1903**

Make Your Idle Money Earn You Interest

Write the FIRST NATIONAL BANK of Richmond, Virginia, for information concerning its certificates of deposit, so arranged that One Per Cent. may be collected every Four Months through your nearest bank or store.

Our experience proves this form for savings to be the most satisfactory plan yet devised for deposits of \$100,00 or more.

or more.
Our Capital and Earned Surplus is

\$1,600,000

John B. Purcell, President.

Jno. M. Miller, Jr., Vice-Pres. Cashier. Chas. R. Burnett, Asst. Cashier. J. C. Joplin, Asst. Cashler.

ABSOLUTELY SAFE 6% BONDS

We sell strictly safe OKLAHOMA School, County, Municipal and Street Improvement Bonds. We pay 4 per cent. on deposits.

Guaranteed by STATE Laws of OK-

LAHOMA, Cap., \$200,000
Write for Bond Circular B 16.
OKLAHOMA TRUST CO.,
Muskegee, Okla.

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 countles of Chesteriteid, Amelia, Powhatan, Nottoway, Dinwiddie, Prince George, Surry, Charles City, New Kent and James City. For plan and membership write to Best security.

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

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Full Information Without Charge, Our free books tell WHAT TO IN-VENT and HOW TO OBTAIN A PAT-ENT. Write for them.

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references. WOODWARD & CHANDLEE, Registered Attorneys,

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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 tions wanted sent free. One million dollars offered for one invention; \$16,000 for others. Patents secured by us advertised free in World's Progress. Sample free.

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



THE GALLOWAY MANURE SPREADER.

Many of our readers are familiar with the advertising of the William Galloway Co., in which it makes some very strong claims for its manure spreader. Having had a great deal of inquiry on the subject, we decided to investigate the matter at first hand. So wrote the company for a list of users that we might ask them what they thought of it, or to give their experience with it. The company readily complied with our request, and submitted a list of some thirty or forty names-all readers of the Southern Planter. We wrote them as follows: "We understand that you are using a Galloway Manure Spreader. Would you mind telling us just what you think of it? Does it come up to its makers' claims?

Pretty nearly everybody answered, and their replies should certainly be exceedingly gratifying to the Galloway Company. It seems that all claims as to capacity, durability, lightness of draft and ease of operation are amply justified. The wagon box feature seems to appeal to all.

The fact that the spreader box can be attached to the running gear of any wagon, makes it possible for practically every farmer to own a spreader. The price is about fifty per cent. of most spreaders, and the work done, about 100 per cent. of any. We give below extracts from a few of the letters.

Oconee Co., S. C., Nov. 11, 1908. I own a Galloway Manure Spreader, and would not have invested in it had they not made such a liberal offer to show me that it would do exactly the same work that the best spreaders in the land would do. It is well made and practical, has no complicated machinery and no complicated price. It is well and aggressively advertised, and has a man of brains and actual field experience behind it, and is amply guaranteed. It needs nothing more but for more farmers to give it a trial and see

H. EUGENE FANT.

Mathews Co., Va., Nov. 5, 1908. I have a Galloway Manure Spread-

exactly for themselves.

er which I purchased one year ago, and have used it for all kinds of manure, and it is giving perfect satisfaction. I never have any trouble with it, and I think the Galloway people are all right.

GEO. G. HUNT.

Scott Co., Va., Nov. 4, 1908.

I have used the Galloway Manure Spreader for two years. It is ahead of any spreader I have ever seen work, and is light on a team. It is the best investment I ever made in a piece of machinery, as it gives per fect satisfaction. I am not afraid to recommend it to my neighbors or

DO YOU HEAR WELL?

The Stolz Electrophone—A New, Scientific and Practical Invention for Those Who Are Deaf or Partially Deaf—May Now be Tested in Your Own Home.

Deaf or partially deaf people may now make a month's trial of the Stolz Electrophone at home. This is unusually important news for the deaf, for by this plan the final selection of the one completely satisfactory hearlag aid is made easy and inexpensive for everyone. This new in-



gradually restored.

clumsy, sightly frequently harmful devices as trumhorns, pets. ear drums, fans, etc. It is a tiny electric the ear, and which, the instant it is applied, magnifies the sound waves in such man-ner as to cause an astonishing increase in the clearness of all sounds. It overcomes the buzzing and roaring ear noises, and also so constantly and electrically exercises the vital parts of the ear, that, usually, the natural UNAIDED hearing itself is

vention (U. S.

Patent No. 763,575) ren-

ders unneces-

such

un-

and

Prominent Business Man's Opinion.

Stolz Electrophone Co., Chleago .- I Stolz Electrophone Co., Chleago.—I am pleased to say that the Electrophone ls very satisfactory. Being small in size and great in hearing qualities makes it PREFERABLE TO ANY I HAVE TRIED, and I believe I have tried all of them. I can recommend it to all persons who have defective hearing.—M. W. HOYT, Wholesale Grocer, Michigan Ave. and River St., Chleago.

Write or call at our Chicago office for particulars of our personal home test offer and list of prominent en-lorsers who will answer inquiries. Physicians cordially invited to investigate. Address or call (call if you can).

STOLZ ELECTROPHONE CO.,

1534 Stewart Building, Chlcago.

Branch Offices: Philadelphia Cincin-Branch Offices: Philadelphia Chich nati, Indianapolis, Los Angeles, Se-attle, Des Moines, Toronto. Foreign Office: 82-85 Fleet St., London, Eng.

"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.

Please Mention the Southern Planter.

Send Your Order For

SEEDS BULBS

POULTRY FOODS

DIGGS & BEADLES

THE SEED MERCHANTS

1709 E. Franklin St. RICHMOND, VA.

We are headquarters for superior Seeds of all kinds, also Poultry Foods and Supplies. Grit, Shells, Bone, etc. Write us Your correspondfor prices. ence solicited.



NEW WARD BLACKBERRY

ONE OF THE HEST.

Fine stock of plants for fall de-livery. Send for descriptive circular of the Ward. For other nursery pro-ducts send for general price list. FRED SHOOSMITH, Hoyt, Pa., and Chester, Va.

Address either office

of the country we offer to send of the Syruces at to be sale value and mailing expense over as you please. A postal will bring the sand our catalog containing many colored lates of our choice Blizzard Bett Fruits. When the Gardner Nursery Co., Box 16x, Osave. 1a. today. The Gardner Nursery Co., Box 105, Osage. la.

> COW PEAS

AND BEANS SOJA

New crop for sale. Write for prices. HICKORY SEED COMPANY, Hickory, N. C.

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

anybody that wants a good light draft spreader.

H. L. ANDERSON.

Halifax Co., N. C., Nov. 4, 1908. I am using a Galloway Manure Spreader, and it is satisfactory in every respect, having fulfilled every claims the manufacturers make for it. J. H. DURHAM.

We have pleasure in publishing this notice, as it seems to be a case of well-earned praise.

B. M. S.

THE AMERICAN SQUADRON ABROAD.

The departure of the United States fleet on a world-wide cruise to the nations of the earth was an occasion of no small importance to our country. No such errand was ever undertaken by any nation before in the history of the world. It will undoubtedly demonstrate to our neighbors what a world-power we are, besides tending to cement more closely than ever our ties of friendship and goodwill with all peoples of the earth. This act may justly be regarded as

a master-stroke of diplomacy.

And what an experience it is for those of Uncle Sam's boys who were fortunate enough to make the voyage! Think what an education it is for them to come in contact with the peoples and customs of so many different countries; and think of the experiences which they necessarily must have before they get back.

One curious incident has recently come to our notice by the receipt of a photograph from far-away New Zealand. It pictures Admiral Sperry, commanding the American Squadron, upon his arrival at Auckland. There, amid the throng gathered to do him honor, he stands receiving this British dependency's welcome under a roof covered with Genasco Ready Roofing, that American product made by the Barber Asphalt Paving Co., Philadelphia. It reminds us that the world is not so large after all when we can travel to the antipodes and there find our old home-friends. The important fact which the Company emphasizes is the fitness of Genasco for use in every climate and every weather condition under the sun and the peculiar merit that this product of natural Trinidad Lake asphalt must have when it gains favor not only to so large an extent in our own country, but in the distant islands of the sea as well.

Genasco does have exceptional merit because it neither rots, rusts. cracks nor breaks. It defies heat, cold, acids, alkalies and every weather condition which a roof is subject to, and continues to give lasting service in every quarter of the globe.

Augusta Co., Va., Dec. 27,'08. The Southern Planter is valuable and interesting, and I must have it. L. A. ZIRKLE.

PUBLIC SALE Real Estate and Personalty

On December 19th, 1908, I will, as agent for the heirs at law of M. C. Thomas, deceased, proceed to sell at public auction, on the premises, at 10 o'clock A. M., that certain tract of land located four (4) miles east of Blacksburg, Virginia, on the waters of the North fork of Roanoke River, containing 396.5 acres. The land will first be sold in four separate parcels containing 148½, 97, 100 and 51 acres, respectively, and will then be offered as a whole. The tract of land consists of about 100 acres river bottom land, the up-Thomas, deceased, proceed to sell at 100 acres river bottom land, the upland being well set in blue grass, and the place is located within four miles of stations on two railroads.

TERMS OF SALE: One-fourth TERMS OF SALE: One-fourth (¼) of the purchase money to be paid in cash; the balance in three equal anual installments, with interest from the day of sale, the deferred payments to be secured by a lien on the land sold.

A copy of the map, showing the division according to which the the

A copy of the map, showing the division according to which the sale will be made, can be seen by applying to J. Walker Slusser, who lives on the premises, or any additional information desired can be obtained by applying to me

obtained by applying to me.
At the same time and place I will,
as Administrator of M. C. Thomas,
deceased, sell at public auction, the
personal property on the place, consisting of live stock, farming implements, household furniture, etc.

STANLEY W. MARTIN.

Lynchburg, Va.

FARM FOR SALE

At a bargain, 3 1-2 miles from Saxe Station in Charlotte Co. Well located, convenient to schools, churches, mills, and stores, well watered by springs and branches, land well adapted to to-bacco and all crops grown in this section. Only one new log cabin on the land; timber enough en the place to do necessary building. Price \$5 per acretime given to suit purchaser.

W. M. WATKINS, Saxe, Va.

Special Attractions is

Loudoun County, Va., Farms.

I will show you any farm for sate in the County FREE OF CHARGE.

> Del. S. CRITTENDEN, Broker, Ashburn, Va.

"In the Green Fields of Virginia."

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

MACON & CO., ORANGE, VA.

STRAWBERRY PLANTS.

Send \$2 for 1000 plonts—Excelsior, Lady Thompson, Aroma, Klondyke, Gandy, etc.—first class stock, true to name. 5,000 enough for 1 acre, only \$8. Cat. free. JNO. LIGHTFOOT, Dept. 7. East Chat tanooga, Tenn.

STOCK **FARMS**

A FINE FRUIT FARM.

97 acres of mountain land, very fertile, 8 miles from railroad station; tile, 8 miles from railroad station; 2 miles from good town; about 40 acres in wood; fine blue grass; spring; good house of five rooms; fine shade; plenty of fruit; barn and outbuildings in good condition. Price only \$1,500. Will sell half interest for \$750 to one who has had experience growing and hand-ling fruit. This is the most ideal location for a fruit farm in this section.

35. Ninety-nine acres two miles from station, in Loudoun county, high state of cultivation. Comfortable house of five rooms, fine stream and well, barn that cost \$1,000, good outbuildings. Price \$5,500. Bargain.

hundred and sixty-four 41 Two acres 4 miles from station in Loudoun Thirty acres in timber, artecounty. Thirty acres in timber, artesian well, 3 never-failing springs; 7-room house, barn and outbuildings fair. A fine stock farm, paying 12 per cent. on investment, in high state of cultivation, Price \$6,300 on easy terms.

51. Three hundred and thirty-five acres, a very desirable farm, in good section of upper Loudoun, 7 miles from acres in grass, 35 acres station; 200 timber, soil clay loam, especially adapted to grass, finely watered by springs ed to grass, nnew watered by springs and running streams, well fenced by wire and rail into convenient fields, choice fruit of all kinds, 14-room dwelling of brick and frame, fronting on well-shaded lawn; large basement on well-shaded lawn; large basement barn and all necessary farm buildings. This is a first-class grazing farm, and in good condition. Is offered at a bar-gain to settle estate. Price \$6,500 if sold at once.

54. Three hundred and fifteen acres in good locality, 8 miles from electric line, 5 miles from station on main line of Southern Railway, 50 acres of timof Southern Railway, 50 acres of thisber and wood, balance in good state of cultivation; chocolate clay soil, very productive, land rolling, well fenced, water in every field, 6-room dwelling, small tenant house, 2 small barns and corn house. This will make one of the best stock farms in the county. Price \$22 per acre, on easy terms.

55. Two hundred and seventy-seven acres in good state of cultivation, just rolling enough; in a good neighborhood, 4 miles from railroad, in Loudoun county. Seventy acres in timber, mostly oak, part of it first-class; ber, mostly oak, part of it first-class; faces on two roads, has been operated as a cattle, sheep and hog farm for 25 years. On account of old age the owner is offering his farm for much less than its true value; is well fenced, 2 houses in first-class condition—one house the other 6 rooms. 10-room house, the other 6 rooms.

Large barn and all necessary outbuildings. Price \$8,000. One-third rooms. One-third down, balance to suit.

Write for new List, Farms in North-ern Virginia, Loudoun and Fairfax Counties. Stock Farms a Specialty,

Please wire me at my expense when you are coming.

ming.
A. H. BUELL,
Va. Herndon, - -

RESOLUTIONS ADOPTED BY THE FARMERS' NATIONAL CONGRESS, MADISON, WIS., 1908.

"That we hereby favor the move-ment for the better conservation of the natural resources of the country, especially the conserving of soil. The movement to stop wanton waste has not commenced a moment too soon. We commend the far sighted statesmanship of President Roosevelt in calling the Conference of Governors to consult on this impor-tant subject and endorse the aims and purposes of the national conservation commission.

"That we positively re-affirm our previous endorsements of an extension of the parcels post believing that it will benefit all the people, especially the farmers, without increasing the postal deficit. We further urge all farmers, both individually and in their organizations, to press their demands upon their Congressmen by letters and petitions.

"That the manufacture and sale of intoxicating liquors is detrimental to the prosperity and morals of the American people, and that we favor the prohibition of the manufacture and sale of such liquors except for medicinal and scientific purposes and except denatured alcohol.

"That we urge upon the Congress of the United States the passage, at its next session, of a law that will provide for the improvement and development of all worthy river and harbour projects and the practical completion of such improvements within the next ten years, and to this end we favor an appropriation of not less than fifty millions at each session of Congress until said improvements are completed.

"That we endorse the efforts of the national and State forestry bureaus in reforestation and work to conserve the forests of the nation. We urge all good citizens to help cultivate a more earnest public sentiment in favor of advancing this most impor-tant subject. We favor and endorse the Appalachian reservation project.

"That we re-affirm our demands of and 1903 for postal savings hanks.

"That we commend the pioneer and highly effective work done by the colleges of agriculture, organized under act of Congress in 1862 for training young men and women in the sciences relating to agriculture, mechanical arts and domestic economy, and we view with pride their continued growth and expansion, and we call on thoughtful parents to freely patronize these institutions of higher learning, and we do urge upon the legislatures of the respective States the necessity and the wisdom of supplying these colleges with financial support in keeping with the liberal federal endowments already granted to these useful State institutions.

SELECTED OFFERINGS IN

VIRGINIA REAL ESTATE \$20 PER ACRE.

Contains 250 acres, about 60 in timber, balance in grass and under cultivation—situated in Loudoun County, Virginia, one-half mile to railroad station on two public roads Land vinginia, one-hair mile to railroad station on two public roads—Land is gently rolling, stream of lasting water running full length of farm, well at house, apple orchard in bearing of about two acres (winter apples), six room house, abundant shade, garden and small fruits, barn 25 by 30, crib, hen house, all in good condition.

\$25. PER ACRE

739 Acres-two and one-half miles to trailroad station. 125 acres in oak timber—balance in grass and under cultivation. Clay soil, fencing good, two large barns good as new, all outbuildings, new 8-room house, abundant shade and nice lawn, two tenant houses. Well at house, also one at each barn running streams of mountains. each barn, running streams of mountain water in every field, grows from 50 to 60 bu. corn per acre, 17 to 22 bu. wheat, and graze from 100 to 150 head export cattle annually.

\$25. PER ACRE.

134 acres—34 acres in timber, balance in grass and under cultivation, 1½ miles to railroad station on two public roads, land gently rolling, soil red clay with stiff clay sub-soil, seven-room house, two barns and all outbuildings all in good condition, well watered, well at house, also one at barns, running stream of lasting water orchard of about 3 acres consisting of orchard of about 3 acres consisting of apple, peach trees and small fruits. GEO. W. SUMMERS, Sterling, Va.

FARMS For Sale.

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

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

Virginia Farms

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

"That we again heartily approve | Please mention The Southern Planter.

ATTENTION

HOMESEEKERS AND INVESTORS.

I sell and exchange Virginia Real Estate of all classes, such as Grain, Dairy, Fruit, Stock, Truck, Poultry and Bluegrass Farms, Village Homes and 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 Wash ington and Alexandria cities by rail and pike, which gives all producers a fine home market.

My facilities for locating you in this

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

229A.—1½ mile from R. R. Sta. \$3,500. Running water, county road front and other attractions. 140 A.—large orchard, barns, dwell-ing, farm fenced into fields and other improvements. Land in high state of cultivation—Price \$4,000.
2 A.—near electric line, necessary buildings, running water, fine truck and poultry farm—\$2,500.
288 A.—Valuable river farm—2 mi. from R. R. station.—\$7,320.

Write for complete list.

FRANK H. COX.

Resident Agent.

Ashland, Va

MARYLAND VIRGINIA

FARMS NEAR WASHINGTON.

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

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

the bill introduced in Congress by Hon. C. R. Davis, of Minnesota, to inaugurate in secondary schools of the several States the industrial education first established by the Congressional land grant, act of 1862, which resulted in the founding of our State colleges of agriculture, mechanic, arts and domestic science.

"That the secretary of this Congress be instructed to correspond with all other important farming and educational organizations and with associations concerned with home economics, urging such organizations to join with the Farmers' National Congress in securing for this bill the friendly and active support of every member of Congress in order that we may thus bring this much needed form of industrial education close to the homes of the farmers and other industrial classes in every State."

Other resolutions were adopted, including one commending the work of Legislative Agent John M. Stahl, of W. L. Ames, and resolutions of condolence in respect to departed members. Among them was a resolution in praise of Madison to the effect:

That the most hearty and sincere thanks of the Farmers' National Congress are due to all who have in any way contributed to making its 1908 session, held at Madison, Wis., a record breaker in attendance and inter-We are under deep obligations to Mayor Schubert, ex-Mayor Groves and the people of Madison for their hospitable and courteous treatment. We are especially indebted to President C. R. Van Hise and the agricultural faculty of the University of Wisconsin, notable Dean Russell, Professor R. A. Moore, A. S. Alexander and A. R. Whitson, for their efforts to make our visit enjoyable and profitable, and for the places which they have taken on our program.

"Our thanks are also due to the speakers who have honored us with their words of instruction, to the newspapers who have so faithfully reported our meetings, to the Woman's Club for its social functions, to our wives and daughters."

BOG SPAVIN.

Charles E. West, Gotebo, Okla., writes, November 15, 1907: "I am in receipt of your letter of recent date. I purchased your Absorbine from the druggist and applied it according to directions as given for Bog Spavin and had grand success One bottle was enough to do the work.

Absorbine penetrates to the seat of trouble promptly and effectually, without blistering or removing the hair. Does not require the horse to be laid up. Mild in its action, but positive in its results. It will give you satisfaction. \$2.00 a bottle at druggists. Manufactured by W. F. Young P. D. F., 109 Monmouth Street, Springfield,

RARE BARGAINS

Northern Virginia Farms

A Few Specimens:

No. 162. Contains 280 acres—80 acres in timber, balance cleared. This land is a splendid quality of grass, hay and corn land. It is smooth and level. Fronts on a good level road 3½ miles from station. Farm is very well fenced and watered by streams with a good well at the house. About one acre in orchard, apples and peaches. Buildings: A new six-room house, barn 30x40 for horses and cows, corn crib and hen house. 75 acres of this land is in meadow. This a bargain for a progressive man. Price \$5,000.

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

No. 176. Contains 346 acres, about 70 acres in timber, mostly oak and hick-ory, situated 1 mile from store, school ory, situated 1 mile from store, school church, shops, etc.; 6 miles from R. R. station. This land is a little rolling and is a fine quality of chocolate clay soil, excellent for grass and grain of all kinds. Good orchard of about 200 apple trees. Farm is well fenced and watered by never failing streams. Spring in every field. Improvements: A good 2½ story dwelling with 8 large rooms, 4 attic rooms, basement, barn, 40x70, in good repair, other out-buildings, all in good condition; farm is located on good road, and about \$10,000 cated on good road, and about \$10,000 is subscribed to macadamize this road to the railroad station. Price per acre, \$30.00.

No. 193. Contains 156 acres, smooth land, chocolate clay soil, with good stiff clay subseil, just rolling enough to drain well, 30 acres in good timber, balance cleared, watered by running stream, very well fenced. In good neighborhood located 7 miles from railroad station, in Loudoun county, sufficient fruit of all kinds for family use, 5-room house in fair repair, other small outhouses in good repair. Price \$3,000.00. \$3,000.00.

No. 194. Contains 175 acres, 25 acres in good timber, balance is cleared, 9 acres in orchard in full bearing, good six-room house, old barn, good granary, hen houses, dwelling in a grand oak shaded lawn, spring at house, farm watered by streams and springs, situated on good pike. One hour's drive from Leesburg, Va. Owner is anxious to sell. Price \$3,500.00.

Send for my Complete List, Wm. Eads Miller. HERNDON, VA.



\$8 per Acre and up

with improvements. Good productive soil, abundant water supply and best climate on earth. Near rail-road and good markets with best church, school and social advantages. For list of farms, excursion rates and our beautiful pamphlet showing what other have accomplished, write to-day to F. H. LA BAUME, Agrl. and Indl. Agt., Norfolk & Western Bg., Box 500, Roanoke. Va.



400 ACRE STOCK FARM \$5,000. 300 acres cleared on which to graze stock and grow hay and grain; 100 acres in thrifty pine and oak; several acres in thrifty pine and oak; several creeks and springs supply never-failing water; 2-story, 6-room house, piazza; also cottage; pretty shade; two barns, stable, ice house, poultry house, tobacco sheds; one-fourth mile to school and store; must be sold immediately to settle estate and price is cut to \$5,000—\$3,200 will be left on easy terms; see details, page 16 "Va. List 21," copy free. E. A. Strout Co., Scottsville, Va. ville, Va.

-WANTED-

To hear from owner having
A GOOD FARM.

For sale. Not particular about location. Give price and description and reason for selling. State when possession can be had. Will deal with owners only. By my unique plan of selling properties you pay not a cent of commission to any one. Write to-day for full particulars. Right now I have more customers for farms than I have farms for sale. If you want a quick sale let me hear from you immediately and I know you will be pleased and surprised with my new methods of bringing buyer and seller together.

L. DARBYSHIRE,

Box 443. Rochester, N. Y For sale. Not particular about lo-

STANDING TIMBER

For sale—A splendid piece of oak and pine timber on about 100 acres of land 1-2 mile from station, good hauling. About 500,000 feet is the estimate Will sell in a lump or have it cut on shares, taking 1-3 of hauling price for my part. The wood also can be my part. The wood also handled with a good profit. also can be

W. M. WATKINS,

Saxe, Va.

Mill for Sale.

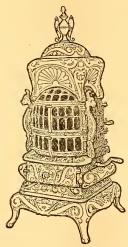
Up to date, 36 baller, water-power, roller mill and saw mill, in good grain section, close to schools, good brick dwelling, garden and spring. Will be

DIXON BROS., Lexington, Va.

Please mention The Southern Planter.

SOMETHING NEW-LATE IM-PROVEMENTS IN STOVES.

The newest and latest improvement in base-burner construction is the hot air flue which takes the cold air off the floor, passes it up through the stove, throwing out hot air at the top, creating a circulation that will change the air in a room fifteen feet square every forty minutes. This was not had by the old-style construction. The Hoosier Stove Co., of Marion, Indiana, have just built the latest thing in this line. The hot air flue in Hoosier Stoves is guaranteed to have fifty-four cubic inches more heating capacity than any stove heretofore put on the



market, and it is said on account of this improved hot air flue to heat at least one room more, with the same amount of fuel, than the oldstyle make of corresponding size. One can easily see the advantage of getting a stove with these new improvements, as the saving in fuel will soon pay for the cost of a stove. The Hoosier Stove Factory is located at Marion, Indiana, 102 State St., and to any one that will send their address on a postal the Hoosier Stove Company will mail free one of their sixtyfour-page catalogues and quote their lowest factory prices direct to you. "They allow you to try a Hoosier Stove or Range thirty days free in your own home," and will send it to you freight prepaid, so that you are not out one penny. If you need a stove you should try one of these before buying.

INVALUABLE.

Rosendale, Man., Jan 20, 1908.

Dr. B. J. Kendall Co.

Enosburg Falls, Vt.

Gentlemen,-Would you kindly send me your Treatise on the Horse and His Diseases? I have used your Spavin Cure and find it invaluable.

Respectfully,

JAS. T. BLACKFORD.

SOUTHERN

POULTRY

GUIDE

This is Cal Husselman's great Poultry Book, now on press. It is freely illustrated with numerous useful and handy homemade accessories to the poultry business. It contains his 40 years' experience as a poultryman It is the best poultry book ever printed and just what you want. It contains more plain, everyday common sense about the chicken business than you ever read. 150 pp., cloth bound. Price? We will almost give it to you. Just send \$1 and we will enter your order for the book and throw in a year's subscription to the Southern Planter. Book will be out before December 1st.

> SOUTHERN PLANTER, Richmond Va.

134 ACRES ON RIVER \$1.700.

Fine location for stock raising; good Fine location for stock raising; good pastures, hay and crop fields; estimated to be 5,000 cords of wood, 200,000 ft. oak and pine timber; apple orchard; 2 story house; excellent spring water; 3 miles to town and R. R.; owner has other business and price is cut to \$1,700, part cash and easy terms. See full details page 22, "Va. List 21," copy free. E. A. Strout Co., Scottsville, Va.

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

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otton Lands in Virginia and the South. ALBEMARLE IMMIGRATION SO-ciety, Charlottesville, Va.

"AFTER THE XMAS DINNER."

A delightful, fascinating and laughable little book. Just the thing for a Christmas remembrance, only 25 cents.

THE ATWELL CO, Richmond, Va.

Tell the advertiser where you saw his advertisement.

What's It Worth?



Kendall's Spavin Cure

Luna, Ark., June 23, 1907.
Dr. B. J. Kendall Co., Dear Sirs:—Please send me your
"Treatise on the Horse." I have 30 mules and have found
Kendall's Spavin Cure to be the greatest liniment ever
used. It has been worth \$500 to me in the last three
years.

No other horse remedy is so powerful or so generally used the world over. Tested over a generation, never found wanting. Cures, without blemish, Spavin, Gurb, Splint, Ringbone, Swellings, Lameness.

Price \$1 a bottle; 6 for \$5. Au excellent limment for household use. Sold by druggists. Ask them for free book, "Treatise on the Horse" or write to

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





Cures Strained Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Sores, Wire Cuts, Bruises and Swellings, Lameness, and Allays Pain Quickly without Blistering, removing the hair, or laying the horse up. Pleasant to use, \$2.00 per bottle at dealers or delivered. Horse Book 5 D free.

ABSORBINE, JR., (mankind.\$1.00 bottle), For Strains, Gout, Varicose Veins, Varicocele, Ilydrocele, Prostatitis, kills pain.

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BEWTOP'S Heave, Orugh, Dr temper and Indigestors Cur-A veterinary Remedy for wine threat and stomach troubles Strong recommends. B. 100 pe-can, of deelers or exp. prepaid The Newton Remedy Co Toledo, Ohlo.

Going Blind, Bar-HORSES ry Co., Iowa City, Ia. Can cure. FREE SAMPLE OF A STRONG ROOFING.

Farmers who are buying ready roofing on the strength of the appearance of a sample often overlook the important feature of the density of materials.

The densest roofing on the marker is Amatite; that is, it has the most stuff packed into it for its thickness. Amatite could, no doubt, have been made twice as thick without using any more material to the square foot, but it would then be more porous and more open to the penetration of air and water

Instead of that, Amatite is pressed under great rollers till it is as tough and dense as it can be made. The weight per roll tells the story. Investigate this before you buy. Full information and sample will be sent in reply to a postal addressed to the nearest office of the Barrett Manufacturing Co., New York, Chicago, Cleveland, Allegheny, Kansas City, St. Louis, Minneapolis, Philadelphia, New Orleans, Boston and Cincinnati.

THE YOUTH'S COMPANION FOR 1909.

The amount of good reading given to subscribers to The Youth's Companion during the year is indicated by the following summary of contents for 1909:

Fifty star articles contributed by men and women of wide distinction in public life, in literature, in science, in business, in a score of professions.

Two hundred and fifty capital stories, including six serial stories; humorous stories, stories of adventure, character heroism.

One thousand up-to-date notes on current events, recent discoveries in the world of science and nature important matters in politics and government.

Two thousand one-minute stories inimitable domestic sketches anecdotes, bits of humor, and selected The weekly health artimiscellany. cle, the weekly woman's article, timely editorials, etc.

A full announcement of the new volume will be sent with sample copies of the paper to any address on request. The new subscriber for 1909 who at once sends \$1.75 for the new volume (adding 56 cents for extra postage, if he lives in Canada,) will receive free all the remaining issues for 1908, including the double Holiday numbers; also The Companion's new Calendar for 1909, "In Grand-mother's Garden," lithographed in thirteen colors.

THE YOUTH'S COMPANION.

144 Berkeley St. Boston, Mass.

Campbell Co. Va., July 29, '08. I never saw an issue of the South-ern Planter that was not worth the whole year's subscription.

M. C. HEATH.

You Can't Talk it too strong. What?

Gombault's =

Gaustic Balsam

As a Liniment

For the Human Body

Springfield, 0., Sopt. 19, 1904.

Lawrence-Williams Co., Cleveland, 0., Lewis Evelsizer, Urhane, R. F. D., e descripted a heat control of his hand. When I first serv he was on his way to heve bis head emputated. I persuaded him to first try gOMBAULTIS CAUSTIC BALSAM, which he did, and on second epplication could rest well at night—the first for weeks. In less then three months he west work on the farm. He will certify to this statement over his signeture. Then Mr. Jenkins, storekeeper end post-instgrates the control of the co

Price \$1.50 per hottle. Sold by druggists, or sent yus express prepeid. Write for Booklet H.

The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

"RARVA" MEAT MEAL.

85 per cent. Protein, 7 per cent, Fat

POULTRY FOOD

Free from preservatives, chemicals or foreign matter of any descrip-tion. It is a meat builder, bone-maker and EGG PRODUCER. It is the lean fibre of beef, clean and pure, appetizing and odorless. Thoroughly dry, ready to feed, or may be used in the mash, as you prefer. Sample on request.

\$3.25. Sack, 100 lbs.

RICHMOND ABATTOIR,

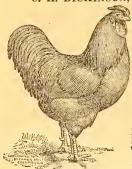
Richmond, Va. Box 267, Dept. M Send for the "Rarva" Booklet.

PRACTICAL

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

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

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Eggs for hatching from the following high scoring birds: Dunston strain
White Wyandotte, Silver dotte, Laced Partridge Wvandotte, Barred Plymouth Rock Buff and White Plymouth Rock Whitman strain Brown Leg-Cornish

horn, Cornish Indian Games, Buff Orpington, R. C. R. I Reds; Northrup strain Black Minorcas. Price, \$1 for 15. Special prices for large quantities. A few choice Trios for sale, Cockerels \$1.25 to \$2.00. Pullets \$1 to \$1.50. I have quite a large number for sale and my birds are finer than ever. Satisfaction guarare finer than ever. Satisfaction guaranteed.

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Sperryville,

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Offers for immediate acceptance a select assortment of Fancy Cockerels and Pullets of each of the following

Black Laugshans, White Faced Span-lsh, White Leghorns, Silver Spangled Hamburgs, S. C. R. I. Reds Red Pyle Games, S. C. Black Minorens, Buff Wyandottes.

This is an excellent opportunity for those who wish to start in the business or improve their poultry—as nothing but fancy stock is offered.

Member and Va. Secy. National Black Langshan Club.

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SPRING HATCHED COCKERELS AND

of the following breeds.
SILVER LACED, and WHITE WY-

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S. C. RHODE ISLAND REDS, WHITE and BROWN LEGHORNS.
FINELY BRED, VIGOROUS STOCK.
Write for prices.
At Va. State Fair in Rich., Oct. 5-10, we won 14 ribbons, including 7 blues, on above breeds.

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Wilmont Dalry and Poultry Farm.

First class breeding stock from the S. C. R. I. Reds (Tompkins and De-Graff strains) \$1.00-\$1.50 each. Spec-ial rates in large lots. B. P. Rock pullets (Bradley strain) \$1.00 each; \$11.00 per dozen.

Satisfaction always guaranteed.

MRS. F. E. WILLIAMS, Charlottesville, Va.

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The work apron that is really protective and practical is the one that wise women demand. This one is just as well adapted to the artist and the studio as it is to the housewife, and will keep the gown of either fresh and free from soil no matter what the occupation of the moment. In the illustration it is made of gingham, but many women like butcher's linen for the purpose, as it is durable and grows handsomer with each washing, and plain colored linens and chambrays share the honors with the figured ones and with percale or any one of the simple printed wash fabrics.

The apron is simply made, is full and gathered and allows a choice of



6131 Work Apion, 32 to 42 bust.

be Made With High or Square Neck, Long or Three-Quarter Sleeves.

the high neck with collar or a square one and of three sorts of sleevesthe long ones with deep cuffs, the long ones with straight bands, and the three-quarter ones finished with bands. It consists of the yoke and the skirt portion, which is gathered and joined thereto. When the high neck is used the roll-over collar completes it. The sleeves are full and whatever the length or the depth of the cuffs they are gathered at their upper and lower edges.

The quantity of material required for the medium size is 914 yards 27, yards 36 inches wide.

The pattern 6131 is cut in sizes for a 32, 34, 36,38, 40, and 42 inch bust. Price 10 cents.

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POULTRY SHOW

Second Annual Exhibition.

Herndon Poultry Association' -

HERNDON, VA.

Jan. 13, 14, 15, 1909.

Liberal Cash Prizes. Beautiful Ribbons. Silver Cups and Gold Specials.

Entries close Jan. 8th. Write for premium list.

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BARRED PLYMOUTH ROCKS

EXCLUSIVELY.

E. B. Thompson's celebrated strain. My birds won at Richmond Show, 1908, 1st and 3d Cock; 1st and 3d Hen; 1st Prize Pen and Association's Special for BEST DISPLAY in Barred Rocks. They cannot be excelled in egg production, size, vigor and beauty. My breeding Cockerels at \$2.50, \$3.00 and \$5.00 each; some exceptionally fine ones at \$8.00 and \$10.00 each. Good breeding Pullets at \$1, \$1.50, \$2 and \$3.00; extra fine ones at \$5.00 each. Satisfaction guaranteed. Satisfaction guaranteed.

> LESLIE H. McCUE, Box 4, Afton, Va.

Barred, Buff and White

PLYMOUTH ROCK

C. Hawkins strain, from winners at Richmond Poultry Show, 1907; also S. C. White Leghorns, heavy layers. Cockerels from any of these breeds. Eggs and baby chickens in season.

> SYSONBY GARDENS, Inc. Petersburg, Va.



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

arge and better stock; Forsyth Ringlets and Forsyth strains. Write me your wants.

> CHARLES C. WINE, Mt. Sidney, Va.

BARRED PLYMOUTH ROCKS.

E. B. Thompson's Celebrated Strain. A few Fine Cockerels for sale; also Thoroughbred Polled Angus Bull Calf. Reasonable Prices.

C. Neale Stacy, Amella, Va.



B. P. ROCK ROOSTERS. A grand lot of fine birds. Buy now. Price low. Forty other breeds. Big catalog, 10c. List free.

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Berger's White Wyandottes



The leading strain of heavy layers and noted winners at noted winners at Va. State Fair, 1908, in strong competition. Ist and 5th cocks; 1st, 2nd and 5th hen, 5th cockerel 5th pullet, D. J. Lambert, Judge. A few more choice cockerels and pullets for erels and pullets for sale. Correspondence

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White Wyandotte

Club of America

Offers to its members only, a handsome Silver Cup for best display of White Wyandottes at the Richmond Show, Dec. 7-12, 1908. Send in your application at once, with membership fee of \$1.00 for one year to State Sec'y, R. O. Berger, 16-N. 20th St., Richmond, Va

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WHITEWYANDOTTES

White Holland Turkeys and White Muscovy Ducks.
Win where shown. Pullets now for sale at \$1 each.

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

Poplar Hill Poultry Farm



S. L. WYANDOTTES

A choice lot of young-sters now ready for

sters now ready to shipment. Cockerels, \$1.25 to \$1.50 each. Pullets, \$1. and \$1.25.

Mine are not only high scoring birds, but egg producers. Satisfaction to every customer.

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

50 Pure-bred S. L. WYANDOTTE

Pullets and 12 Cockerels for sale, \$1 each or \$10 per dozen. Satisfaction guaranteed or birds may be returned at my expense.

J. H. SHAW,

Bracey, Va.

Glenview Orpingtons. S. C. BUFFS EXCLUSIVELY.

I will not sell any eggs for hatching next season. If you want some of the best stock of Orpingtons in the South, BUY NOW. Prices reasonable. State your exact wants.

B. S. HORNE, Keswick Va.

MISS LOUISE V. SPENCER, Blackstone, Va.

Headquarters for pure-bred R. C. Rhode Island Reds.

Stock for Sale. Member R. I. Red Club.

The fad of the one-piece garment has extended to the realm of underwear, and the drawers that are made in one piece are the latest shown. In the illustration they are trimmed with frills of embroidery and with those of the material trimmed with insertion and both styles are equally correct. The feature of the garment is to be found in the perfectly smooth fit at the waist line combined with abundant flare at the lower edges. All materials that are used for underwear are appropriate.



6016 One-Piece Circular Drawers, 22 to 32 waist.

The drawers are cut in one piece and are circular in shape. The upper edge is finished with an under-facing that is stitched to form a casing at the back portion, and in this casing tape or ribbon is inserted to regulate the size.

The quantity of material required for the medium size is 1% yards 36 inches wide, with 3 yards of embroidery, 4 yards of insertion; or 21/4 yards 36 inches wide with 5 yards of insertion when frills are of the material.

The pattern 6016 is cut in sizes for a 32, 34, 36, 38, 40, and 42 inch waist measure. Price 10 cents.

Address The Southern Planter, Richmond, Va.

HOW TO MAKE POULTRY PAY.

There's no great secret about it. It's more a matter of plain, everyday common sense than anything else. Remember, first, that your hens are confined and can't help themselves. If you give them liberty and unrestricted range they would solve their own problems without your help. But, being confined in yard or house, it becomes positively necessary that you replace natural conditions by something so much like them that the hen won't know the difference. In other words, you must help her to get out of grain, meal, milk, meat, or whatever you feed, the elements she would help herself to if she were out in the fields picking at grass and leaves, insects and worms. This isn't impossible nor is it difficult. "The Dr. Hess Idea," put in practice, is a comPure-Bred.

Barred Plymouth Rocks

Hens, Cocks, Pullets and Cockerels for sale; one Mammoth Bronze Tom; also Poland-China Pigs. Low rates to quick buyers.

Picdmont Stock and Poultry Farm, Miss E. Callie Giles, Prop. Whittle Depot,

RINGLET

Barred Plymouth

Cockerels, E. B. Thompson strain, \$2 to \$5 each. Satisfaction guaranteed.

A. J. S. DIEHL, Port Republic, Va.

C. White Leghorns

First prize Pen Pullets; 1st prize Pen Hens, 3rd Hen, 5th Cockerel at Va. State Fair, 1908. Stock and eggs for sale.

W. R. TODD

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ROSE COMB

RHODE ISLAND

Pullets from prize-winning stock—for sale. Orders for eggs received, \$1 for 15; 3 sittings for \$2.50. Place order early.

L. E. SMITH.

Appomattox, Va.



Walker's Walker's
WHITE ROCKS.
Fischel's Strain Direct.
Am booking orders
and can make prompt
delivery of breeding
pens, pullets and cockerels. Finest stock I have ever raised. Glad to answer inquiries. C. M. WALKER,

Herndon, Va.

BLACK

ANGSHANS

Some nice stock for sale. .

JOHN C. ADAMS, Bristol, Va.-Tenn.

FOR

BLACK LANGSHANS

of quality write to

A. M. BLACK.

Tazewell Va.

SPRING BROOK POULTRY FARM. Culpeper, Va., H. H. Scott, Prop

Breeder of Northrup strain Black Minorcas, Whitman strain of Brown Leghorns, and the best Silver-Laced Wyandottes. Have been breeding Black Minorcas seven years, always with the best type in view. Stock and Eggs in season at very moderate prices, considering the quality. Write me for prices and full particulars.

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

HILL POULTRY FERN

BREEDERS OF ARISTOCRATS ONLY.

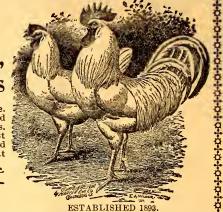
Barred Plymouth Rocks, Black Minorcas, S. C. Brown Leghorns, S. C. White Leghorns

For sixteen years I have bred these birds on my farm with free range. They have constitutions; are essentially aristocrat egg-shellers; have, and can, hold their own against the arrogant boast of any blue-ribbon winners. Have won prizes running from first to fourth, wherever shown. Highest scoring male, female and ten highest scoring fowls in the show. Never had better quality nor more vigorous utility. A few Cockerels of each variety at \$2.50 each, all strictly first-class birds. Shipped on approval.

EGGS \$1.50 PER SITTING.

Address J. WALLACE SNELLING, R. F. D. 1, MANCHESTER, VA.

(Yards, Stop 9, Richmond-Petersburg Trolley.)



ESTABLISHED 1893

Fall Sale Now On.

PEKIN DUCKS WHITE GUINEAS WHITE WYANDOTTES TOULOUSE GEESE

from winners at Madison Jamestown Exp., Phila., and Bred Square. State Fair.

Clearance sale White Leghorns, celebrated Wyckoff strain, 75c each.

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Berkshires and Wyandottes.

Will book orders for a limited number of Berkshire pigs for early spring delivery.

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The greatest layers on earth, easy to raise, no lice. Prize winners Va. State Fair. Also R. C. Reds and S. C. B. Leghorns.

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\$5 per pair; White Guineas, \$2.50 per pair, all bred from our prize-winners.

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for sale, both old and young. Prices right to early buyers.

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plete answer to the whole poultry problem.

Dr. Hess has shown, beyond question, that everything hinges on the perfect performance of the digestive function. That is, cause your hens to digest, without unnecessary waste, the greatest possible amount of the food given, and there will be no lack of needed elements for either growth or egg production.

It is a mistaken idea to think that a hen will do this any way. She can't without the assistance of a tonic, because her overtaxed organs sooner or later refuse to accomplish their office, under the continued strain of heavy feeding and the inactivity of confinement. Right at the very start, then, the poultry man should begin a system of care and feeding that will render impossible any such trouble as this.

We spoke a moment ago of the necessity of helping the hen to get from her food while confined the elements she would get if allowed to forage for herself over the fields at large.

Poultry Pan-a-ce-a-a true tonicmakes this possible because it increases digestion. By increasing digestion you also increase assimilation. The more food digested the more the hen has to use, and the fuller the egg basket.

If it fails you are no loser, for you get your money back; if it does for you what it has done for others you will get substantial profits out of the poultry industry.

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Sons of a 32.25 pounds sire. We are offering Holstein bull calves, sired by the only living son of the great Frenesta Hengerveld De Kol. Butter 7 days 32.25; average fat 4.70. Out of granddaughters of De Kol 2nd's Butter Boy 3d, De Kol 2nd's Mutual Paul and other noted sires. At farmers' prices

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A nice lot of heifers and a couple of roan bull calves for sale at a bargain to quick buyers.

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All stock in best condition and guaranteed as represented.

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The lean bacon hogs—pigs, bred sows, and service boars, all registered and of best blood. BERKSHIRES.

Fine pigs and service boars entitled to registration and of blue ribbon stock. Am out of Poland-China pigs at present. J. C. GRAVES, Barboursville, Va.

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Attention is directed to the ad. of the Sydnor Pump & Well Co. in this issue. This firm has been installing this class of machinery for twenty years and their experience makes an estimate from them worth consider-

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Before you do any planting or buy seeds you should by all means write for a copy of Gregory's new seed book. This book is published strictly in the interest of farmers and gardeners. Not only does it illustrate and describe the new and old varieties, but it helps make the planting a success by giving expert advice on the raising of various vegetables. In addition to the information contained in this book, the publishers are willing at any time to answer questions This fact alone means a by mail. great deal to the man who is striving to get the biggest returns from his planting.

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To learn all about the many new

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One sorrel gelding, coming 4 years old, compactly built, easy to keep, well broken to work anywhere, very gentle, drives and rides well—a splendid family horse; price \$150.

One chestnut mare, 9 years old, weighs 1200 lbs., blocky and easy to keep, a first-class brood mare, in foal to a fine Hackney stallion, well broken to all farm implements and drives well in harness. Price, \$150.

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Four good ones, three horse, all by "Chiswick." and 4 years old next May. Will be 3 Oldest are broken. Write me for prices and particulars.

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From Registered Stock of Fine Breeding.

Knowle of Cook Farm 5057 at head of herd. Sire 2nd prize boar at Royal Show, Eng., 1907., Dam, 1st prize gilt at same show, 1907.

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

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- BUFF WYANDOTTES, THE IDEAL fowl for color, eggs and table. My birds won 1st Cockerel, Pullet and Pen at Richmond last January. Hens and Cockerels for sale. Try me. Geo. W. Osterhout, Bedford City, Va.
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- SACRIFICE SALE OF SINGLE COMB White Leghorns, Wyckoff Strain, If you want something good now is your chance. Virginia Poultry & Berry Farm, Sutherlin, Va.
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- FOR SALE MAMMOTH BRONZE Turkeys, Toms \$4 apiece; White Wyandotte and R. C. Rhode Island Red cocks and cockerels. John Campbell, Route 2, Beaverdam, Va.
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- ONE PAIR MATCHED ROAN MARES five years old, 61 inches. One pair matched Shetlands. One child's pony, gentle and kind. Jno. M. Cunningham, Brandy Sta., Va.
- LARGE YORKSHIRE PIGS AT BARgain prices. Parents registered and of best breed and exceptionally fine specimens. Must sell to make room for others. Paul Bouton, Ivy Depot, Va.
- WANTED TO BUY—TWO PURE-BIED grey Percheron mare colts, entitled to registry, at reasonable prices; also one Victoria sow, 3 to 6 months old from registered stock Address, J. A. Dove, Cornelius, N. C.
- BIG ENGLISH BERKSHIRUS, PRIZEwinning Mammoth Bronze Turkeys, R. C., R. I. Reds, White Muscovy Ducks. Ducks \$3 per trio. H. B. Howe, Dublin, Va.
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- FOR SALE—THREE JERSEY BULLS, two grades and one fine registered animal. Price reasonable. C. M. Bass, Rice Depot, Va.
- REGISTERED LARGE YORKSHIRE Hogs, Hampshire Sheep and Buff Plymouth Rock chickens. J. D. Thomas, Round Hill, Va.
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Live Stock (Continued).

- OR SALE TWO REGISTERED Percheron yearling stud colts. McCloy, Agt, Birdwood, Va. FOR
- SOME DUROC GILTS AND BOARS 4 to 6 months old. Eligible to register. Cheap for quality. C. L. Shenk, Luray, Va.
- BEST BREEDING OF YORKSHIRE hogs at farmers' prices. W. E. Stickley, Strasburg, Va.

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- FOR SALE—TWO HUNDRED ACRE farm; \$1,000 worth of timber; thirteen room slate roof house; fine baseteen room slate roof house; fine basement barn, forty cow stalls; four other barns; wagon house; silo; water piped to buildings; plenty of fruit; a business farm. Price, \$6,000, \$3,000 cash. balance eight years at five per cent. Hall's Farm Agency, Owego. New York.
- WE BUY AND SELL REAL ESTATE of any kind, anywhere. Let us sell your farm. We have applicants every day for Virginia farms and cannot supply the demand. List your property with us, we produce results. Rittenour, 427 Munsey Building, Washington, D. C.
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- SELL YOUR FARM DIRECT TO buyer. Write J. H. Bonnell, Jamestown, N. Y.
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- FOR SALE—LIVERY STABLE WITH 75 acres land and 7 village lots. Terms easy. J. B. Thomas, Drewryville, Va.

POSITIONS-HELP.

WANTED-A PRACTICAL POULTRYman thoroughly experienced in feedman thoroughly experienced in feeding for eggs, operating incubators, brooder houses, etc., desires position on plant in operation or with man having suitable farm and capital to plan, build and manage plant on salary. No enterprise on farm pays as high interest on capital invested as raising of market eggs. Correspondence solicited. Highest reference. Address 'L' care Southern Planter.

- FARMER WANT WANTED-I good man to run my farm or part of it for the coming year. He to furnish labor and I to furnish the furnish labor and I to furnish the land, team, feed for teams, etc. Crops to be grown, oats, corn, potatoes, to-bacco if desirable and other small crops if mutually agreed upon. Improvements all good, fruit abundant, place perfectly healthy and unusually attractive. Farm can be bought if desired. Reference required. Geo. B. Morton, 2805 Q St. Washington, D. C.
- MANAGER WANTS POSITION—FOR ten years manager of largest stock farm in Eastern Pennsylvania. Thoroughly practical and experienced in modern farming. Horses, dairy and sheep. Poultry, handling men, etc. Forage crops, silo and ensilage. Strictly temperate. Give full particulars. Address, Temperate, care Southern Planter.
- WANTED-Responsible man with horse and buggy in each community, salary \$5 to \$10 per day to take orders from owners of farms, orchards and home gardens. A splendid opportunity for farmers' sons, also fruit tree and sewing machine agents to make a business connection which will become more profitable each year. Address: P. O. Box 6, Young's Island, S. C.
- POSITION WANTED BY Englishman as YOUNG married working foreman on farm; has been on farm all his life and has had experience with stock; will take place under supervision of another or will take charge of cattle; open for immediate engagement. J. M. care Southern Planter.
- POSITION AS GENERAL FARM MANager by educated man, age 42, understands agricultural machinery, the care of stock and management of colored help. Wife willing to take charge of butter and poultry or act as housekeeper. Manager, care Southern Planter.
- GOOD RELIABLE WANTED - A young or middle aged married man, on a grain and stock farm. Work the year round. Wages \$30 per month with house, and one cow to milk. M. M. Spence, Fairbury, Ill.
- MANAGER-EXPERIENCED, STRICTly temperate, with references, wants charge of a large farm or estate. Address Manager, care Southern Planter.
- WANTED POSITION AS MANAGER on large farm. Twenty (20) years experience. No family. Reference. Address Farmer, Va. Trust Co., Richmond, Va.
- WANTED—POSITION AS SUPERIN-tendent of a large estate by a man who can give good references and make good. W. B. Ellwood, Center-ville, Ind.
- AGENTS WANTED TO INTRODUCE our new Metal Hameless Horse Collars to farmers and teamsters. J-S. Company, Box P, Caro, Mich.
- WANTED—A STRONG, HEALTHY IN-telligent middle aged woman as housekeeper. King & Hill, Kendalia, W. Va.

MISCELLANEOUS.

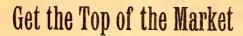
- WE WANT SWEET GUM LOGS, 15 to 30 inches in diameter, clear of knots, sound and straight, 32 to 56 inches long. Also White Sap Poplar 42 to 56 inches long. Send us prices per 1,000 feet, delivered in Manchester, or f. o. b. cars your station. Also, state when you can make delivery. Manchester Basket, Rattan & Woodenware Works, Manchester Va Woodenware Works, Manchester, Va.
- MAGAZINES, NEWSPAPERS — WHY not save money, time and trouble on your magazines and newspapers. One your magazines and newspapers. One remittance, the lowest price, to me, covers the transaction. Send for price list clubs. Prices quoted on any periodical on request. References as to reliability the best. Inquiries solicited. E. W. Lipscombe, Box 80, Richmond, Va.
- WANTED-TO BUY ALL Wild Birds and Animals, particularly Tame Deer, Wild Turkeys, White Squirrels, Peafowl, Otters, Red Foxes Gray Squirrels, Partridges, Pheasants, Beaver. State price when writing. Dr. Cecil French, Naturalist, Washington, D. C.
- FOR SALE—ONE DANDY WINDMILL, 60 ft. tower, 10 ft. wheel, guaran-teed to be in first class condition and good as new. Sold for want of use and no other reason. Address, Stanton Tanning .Co., Inc., Box 155, Richmond, Va.
- OR SALE OR EXCHANGE FOR good cows—1 nice rubber tire close carriage, something swell and as good as new, at a great bargain. 1 spring wagon good as new, price \$40. 1 Champion mower (second hand) price \$20. Address W. E. Highfill, Box 303, Danville, Va. FOR
- FOR SALE—ONE 3-HORSE POWER Vertical Steam Boiler and Engine. (Engine attached to boiler.) In first class running order with all fix-tures complete. Address Jno. S. Ewell, Jr., Hickory Grove, Va.
- FOUR OF THE MOST IMPROVED machines. Corn Binder, Double Disc Plow, Disc Drill, Silage Cutter with blow pipe, all good as new. Thos. Christian, care Box 33, Keswick, Va.
- W. H. COFFMAN'S ILLUSTRATED herd catalogue of his magnificent Berkshire Hogs is now ready to mail free to breeders at their request. Address, Bluefield, W. Va.
- OLD VA. HAMS-RECIPE FOR PERfectly curing without becoming hard, finest flavor, for 50c. M. Cook, 220 Citizens Bank, Norfolk, Va.

WOODWARD & SON, RICHMOND, VA.

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

buildings covering ten acres.

- TERRACING? DITCHING? GRADING?
 Best \$10 farm level for \$6.66. Write
 at once for special offer. Frank
 Wright, Mf., Cave Springs, Ga.
- WANTED—100,000 READERS FOR, "After the Christmas Dinner." Atwell Co., Richmond, Va.
- COW PEAS WANTED, ANY QUAN-tity, will pay cash, W. S. Murray, Hollins, Va.



If you could put a lot of heavy fowls in A-1 market condition and them just when scarcity makes high prices, you'd consider it good business, wouldn't you?

That kind of thing is done by hosts of farmers and poultrymen who have no better birds and no more fattening foods, than you or any one else. It isn't so much what a fowl eats as what a fowl digests that does the business. These men skim the cream' because they give their fowls a regular daily portion of Dr. Hess Poultry Pan-a-ce-a once a day. That is the secret, and you can get just as good results as they if you follow their way.

Dr. HESS Poultry PAN-A-GE-A

makes a fowl thrive because it contains tonic properties which are a most positive aid to the digestive organs, and it cures gapes, cholera, roup, and the like. It causes the greatest possible assimilation of multition, hence, the greatest possible growth.

Poultry Pan-a-cea is "The Dr. Hess Idea." He believed that good digestion was the foundation of all success in feeding. That it was possible to aid digestion and thus reduce food waste. Poultry Pan-a-ce-a does this very thing. He can the treceive a little of it daily are always laying eggs and always healthy.

Little chicks grow fast and escape most checken ills if it is given to them; and when moulting time comes, Poultry Pan-a-ce-a strengthens all fowls to pass this trying time safely. Dr. Hess Poultry Pan-a-ce-a unakes good blood and carries dead poisonous matter out of the system. It is endorsed by leading poultry associations and sold on a written guarantee. A penny's worth is enough for 30 hens one day.

Except in Canada

Except in Canada

Send 2 cents for Dr. Hess 48-page Poultry Book, Free

DR. HESS & CLARK,

Ashland, Ohio.

DR HESS STOCK FOOD

Every time a steer, cow, horse or hog, gets a little of Dr. Hess Stock Food in its grain ration, the animal is made stronger to digest and use its food. This is "The Dr. Hess assimilate and gain will be rapid and steady. Dr. Hess Stock Food is composed of beneficial elements—iron for the blood, bitter tonics and cleansing nitrates. It increases milk, hurries fatting and gives good health to all domestic animals. Promoting stock health and condition is also a profitable feature of feeding Dr. Hess Stock Food. Sold on a written guarantee.

100 lbs. \$5.00; 25 lb. pail \$1.60. Except in Canada and Extreme West and South. Smaller quantities at a slight advance.

Send 2 cents for Dr. Hess Stock Book, Free,

INSTANT LOUSE KILLER KILLS LICE

KNEW WHEN HE WAS HAPPY.

The soul of an editor who had died of starvation was being conducted to the Elysian fields. As they passed the portals of the infernal regions, he asked his guide if he might not go in and look around. The guide consented, but warned him not to stay but a few minutes, as he could not wait long.

A long time passed, and the editor had not returned; so the guiding angel went in search of him. He found him before a cage in which a number of doomed wretches were being toasted on red-hot griddles. Over the cage was the sign "Delinquent Subscribers."

"Come," said the guide; "we must be going."

"Don't wait for me," replied the editor. "I'm not coming. This is heaven enough for me! "-November Lippincott's.

Rockingham Co., Va., Aug. 3, '08.
The Southern Planter 'is still ahead of all other agricultural jour-JOHN I. WOOD. nals.

Brompton Stock Farm.

We offer for December delivery several Young Jersey Bulls and two Guernsey Bulls, six and twelve months old, Jersey yearling heifers in calf, and a lot of high grade Jersey and Guernsey heifers, one and two years old. Brown Chinese Geese, Toulouse Geese, Bronze Turkeys, Muscovy Ducks and Plymouth Rock fowls. Also Collie and Fox Terrier puppies.

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

JERSEY CATTLE.

High-bred Cows Fresh to Pail. 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.

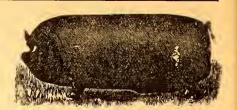


Ft. Lewis Stock Farm

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.



HELPS FOR THE POULTRY INDUSTRY.

The incubator has doubtless done more for the poultry industry than has any other singe factor. "Raising chickens" was of little importance before this machine was invented, simply because "hen-hatched" chickens could not be matured early enough in the season to sell at a profit. However, the incubator now makes it possible for chicks to be well matured by the time most hens begin to show signs of broodiness.

Thus incubators have come into common use, and some few makes have established their right to the

confidence of the public. Prominent in this class stand the "Excelsior" and "Wooden Hen," the former having been one of the earliest of the artificial

hatching machines put on the market. Both types are built upon practical lines, and have won the approval of thousands of poultrymen everywhere. They are made in sizes varying from fifty to six hundred eggs, thus adapting themselves to poultry plants great and small.

In "Excelsior" and "Wooden Hen" Incubators the principles of heat, moisture and ventilation, so vital to the development of healthy chicks, have been perfectly worked out. Regulation of the heat, which may be supplied by kerosene, gas or electricity, is practically automatic, reducing to almost nothing the attention required to keep the machine going.

"Excelsior" and "Wooden Hen" Incubators and Brooders are illustrated and described in attractive catalogues and literature issued by the manufacturer, George H. Stahl, Box 76-B, Quincy, Ill., who will gladly mail same to any address upon request.

THE COOK FARMS.

J. T. Cook & Co., Lexington, Ky., the well-known Jack breeders, advise us that their winnings at the various Fairs this year are greater than ever. This means a great deal, of course, as they have always gotten their share. Only once in seven years have they lost the premium in the herd ring at the Kentucky and Tennessee Fairs.

FOR SALE!

BERKSHIRE GILTS and BOARS.

WELL DEVELOPED

JERSEY BULL CALVES

CORRECT DAIRY TYPE.

GREAT PRODUCING ANCESTORS.

Forest Home Farm, PURCELLVILLE, VIRGINIA.

DUROCS

SHORTHORNS

POLLED DURHAMS

SHROPSHIRES

THE DUROC is the most prolific hog on earth. The large fairs of the West prove that they are the most popular hog of that section. The demand for them in the South shows conclusively that they are the coming hog of the South. We have the largest herd in the East and one of the most fashionably bred herds in the world. Our herd averaged over eleven pigs to the litter this year. Send for printed catalogue if you are interested in hogs. Boars, Sows in pig, Shotes and Fall Pigs for sale—two hundred in all. Send for "Duroc Facts."

Shorthorn Cows, Heifers and bulls, dual purpose, pure Scotch and Scotch topped, at prices that will make you buy.

Shropshire Rams and Ewes, Yearlings and Lambs.

LESLIE D. KLINE, Vaucluse, Va.

Glenburn Berkshires.

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

FORFARSHIRE GOLDEN LAD JERSEYS.

Write for Catalogue.

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

IF YOU WANT THE BEST HOG

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

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.

Hygeia Herd Pure-Bred Holstein-Friesians.

The herd offers a few more well bred bulls and bull calves from large milk and butter producing dams and sired by

Pontiac Calypso's Son, No. 39469.

The dam of this richly bred young sire, Pontiac Calypso, No. 61,100, has an official record of 28.43 pounds of butter in 7 days, with a milk record of 560.3 pounds, or an average of nearly 10 gallons per day for 7 days. His sire's dam, Beryl Wayne, No. 32,496, produced 27.87 pounds of butter in 7 days.

The breed not only holds the milk, but also the butter records of the world.

It pays to get the best blood to head your herd, therefore write for pedigrees and prices.

No females offered for sale at the present time, as the herd will be numerically increased as rapidly as possible.

possible.

HYGEIA HERD.

W. Fitzhugh Carter M. D., Owner,

Crozet Albemarle County, Virginia.

Address: W. F. Carter, Jr., Agent.

HOW I MET GEN. SAM HOUSTON.

In early December, 1859, I left Baltimore in the pursuit of my profession as a civil engineer to take part in the construction of railroads just be-ginning in Texas. The journey from Baltimore to Austin was then a matter of weeks instead of days as at present. A journey with many changes by rail brought me to Memphis, then a week's leisurely journey on one of the fine packet steamers then plying on the Mississippi, loading cotton, brought me from the snow and ice of the North to the balmy sunshine at New Orleans. On a bright sunny day I stood on the wharf at Berwick's Bay on Bayou Atchafalaya, where the Vera Cruz steamer, Orizaba, was to take us to Galveston.

A tall gentleman in clerical attire was there introduced to me as Bishop Gregg, the newly elected Bishop of Texas for the Protestant Episcopal Church there, and he seemed to take a great interest in the young man who was to be a traveling companion all the way to Austin. It was a bright Sunday morning when we arrived at Galveston. There was then no railroad connection northward from Galveston, and we had to wait till Monday afternoon for a steamer for Houston, so that I had the pleasure to hear the first sermon preached by Bishop Gregg in his new Diocese.

Our steamer to Houston was the regular flat bottomed Mississippi river type, but even such a boat stirred up the mud in the shallow waters of Galveston Bay and it was night by the time we entered the tortuous stream known as Buffalo Bayou, and it was a slow passage for our big steamer up the narrow stream, where the trees almost met overhead, so that it was morning when we reached Houston.

There we found the terminus of the then only railroad in Texas, running out to Hemstead on the edge of the Brazos bottoms seventy miles, from which point we took a stage drawn by six horses, and had to pay ten cents per mile for our passage and were allowed forty pounds of baggage, while my trunk, with in-

THE HOLLINS HERD

HIGH-CLASS HOLSTEIN-FRIESIANS.

A working herd-working every day in the year.

This herd of 22 head, of which 14 head are heifers with 1st or 2d calf, milked from the 1st of Oct., 1907, to the 1st of Oct., 1908;

195.941 LBS, OF MILK;

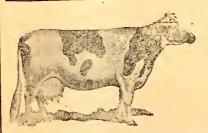
An Average of 8,906 lbs per cow per year.

YOUNG REGISTERED BULLS FOR SALE.

JOS. A. TURNER, General Manager,

Hollins Institute,

Hollins, Va.



HOLSTEIN FRIESIANS BERKSHIRES HACKNEYS

THE GROVE FARM.

Write me your wants.

T. O. SANDY, Burkeville, Va. N. & W. and Southern Railways.

BILTMORE FARMS, BILTMORE, N. C. Berkshires = Jerseys = Poultry

Thers is-

ONLY ONE WAY to find out about the Good Things We Are Offering, and that is to Write To-Day. We Can't Tell It All In This Advertisement.

BUT We have a Bunch of Literature which we will send free upon request, which Tells All About It.

Address BILTMORE FARMS,

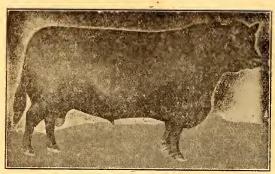
R. F. D. No. 2.

BILTMORE, N. C.

Ask for special price on our entire loft of pigeons and loft fittings.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

ROSE DALE HERD ABERDEEN-ANGUS CATTLE



We offer to the farmers and breeders of the East strictly choice Young Registered Bulls from weanlings to serviceable age. They are of the straight, broad-backed, low-down, compact, blocky type. Many of them show ring animals. They represent the blood of Master II. of Meadow Breok; Gay Lord, Jr.; Heather Lad II., Zaire V., Ermine Bearer, Blackbird of Corskie IV., Black Abbott, Abbottsford, Coquette X., Etc.

They are well grown out, in thrifty condition, but not pampered. Come and see them or write us your wants. Prices right. We can please you. Angus Cattle are our specialty. We raise no other stock, but give them our undivided personal attention.

To avoid inbreeding we offer an exceptionally good herd bull. Write for particulars. Address

ROSEDALE STOCK FARMS, JEFFERSONTON, VA.

struments and books, weighed nearly 200. But after settling for the excess, and seeing the stage piled high with baggage, we were told that the passengers would have to walk several miles to the other side of the Brazos, since the team could barely haul the stage and baggage through the deep mud of the bottoms. It was the first time I ever paid ten cents per mile for the privilege of walking.

Crossing the river, we soon came from the low "hog-wallow" prairie to the rolling uplands at Chapel Hill. Bishop Gregg, however, was a very agreeable traveling companion, a splendid conversationalist, and, as day after day passed and night after night for we were from Tues-day afternoon till Friday morning going from Hemstead to Austin, and slept on the stage, the time passed in a very agreeable manner.

Wishing to see as much as possible of the country, I rode in the day time on the box with the driver, who seemed to take a great interest in making a young tender-foot acquainted with Texas and its customs. At that time every one went armed in Texas, and, wishing to do in Rome as Rome did, I had bought a Navy Colt and belt and holster, and the driver, after a careful examination of my gun, approved it, and laughingly said that with such a guard he did not fear the road agents.

Getting into the Black-Jack country, he pointed out here and there a tree where he said a man had been hanged at different times. I asked what they were hanged for. "Hoss stealing," he said. "Do they hang people here for stealing horses?" said I. "Well, youngster, what would you hang a man for if not for steal-inng horses?" was the rejoinder. Since mustangs were worth then \$10 to \$15 per head, I though that the penalty seemed severe, but said nothing. At noon in the Black-Jack country we drew up to a noted wayside

OTHER HERDS COME AND GO BUT THE OLD ESTABLISHED

SUNNY HOME HERD

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,

R. F. D., Byrdville, Va.

Station, Draper, N. C. at the farm.

NO REASONABLE OFFER REFUSED



ANGUS CATTLE and HACKNEY HORSES

At sacrifice prices. A destructive fire left us without adequate shelter for our stock and we

are forced to sell it.

Every animal we offer is all right in breeding and has the backing of our establishment, the Delaware Stock Farm. Simply our misfortune affords you a rare chance to buy first class stuff at your own price. Write us your wants.

MYER & SON, Bridgeville, Del.

oung Hereford Bulls 🤏



We have a few Good Young Bulls for sale at reasonable prices, quality considered. Will gladly give description and prices to prospective buyers.

H. A. S. HAMILTON & SONS, Shadwell, Va.



CHESTER WHITES.

Registered herd; first premium stock; largest and most prolific hog on record; 3 sows, 41 pigs breeding stock, 400 to 700 pounds; easy feeding; Service Boars, Sows bred. Fancy Pigs for sale. My time to this breed, 11 years. The best money can buy and feed produce. P. M. FUNKHCUSER, Winchester, Va. Registered herd; first premium stock;

References: Farmers and Merchants National Bank, Winchester, Va.

When corresponding with our advertisers always mention Southern Planter.



Pure-Bred POULTRY

Farmers, now is the time to order your Breeding Birds for 1909. I have choice birds of the following breeds. Barred, White and Buff Plymouth Rocks, White, Brown and Buff Leghorns, White and Silver Wyandottes, White, Black and Buff Orpingtons, Rhode Island Reds, Silver Spangled Hamburgs, Indian Games, Black Minorcas, and White Face Black Spanish chickens; Rouen and Pekin Ducks, Mammoth Bronze and White Holland Turkeys. Do not delay, place your order

Do not delay, place your order today and get advantage of lowest prices. Address

JAMES M. HOBBS,

1521 Mt. Royal Avenue.

BALTIMORE, MD.

Pure-Bred WHITE HOLLAND and MAMMOTH BRONZE TURKEYS.

Farmers do not delay. Now is the time to buy and save money. Choice 15- to 16- pound White Holland Toms, \$5 each; Younger Toms, \$4 each; 25-pound Yearling Toms, \$6 each. White Holland Hens of this year's hatch, 8 to 12 pounds each, \$4 each, or \$7.50 for two hens.

two hens.

My Mammoth Bronze Turkeys are extra good this year, and the prices extra good this year, and the prices for December are as follows: 30-to 35-pound Yearling Gobblers, \$6 each; 18-to 20-pound Young Toms, \$5 each; Later hatched, 15-pound Toms, \$4 each; 12- to 14-pound Early hatched Hens, \$4 each; 9 to 11-pound Hens, \$3 each.

I can please you, and have over 200 Pure-Bred Turkeys for sale all in perfect health. Order to-day and secure the choicest birds. Address secure the choicest birds.

secure the choicest birds. Address

JAMES M. HOBBS, 1521 Mt. Royal Ave, Baltimore, Md.



Pure-Bred HOGS

I have the finest lot of Berkshire, Poland-China, Chester White, York-shire and Tamworth Pigs and Hogs I ever owned. I can mate Pigs and Shoats for breeding 2, 3, 4 and 6 months old, and have fine 150-to months old, and have fine 150-to 200-lb. Service Boars and Bred Sows ready for immediate shipment. Now is the time to order and get them in their winter quarters. Write today a list of your wants. Satisfaction guaranteed and references furnished. Address,

JAMES M. HOBBS,

1521 Mt. Royal Avenue.

BALTIMORE, MD.

inn known as Cunningham's. As the stage drew up in front to stop for dinner and change horses, I noticed a large and rather roughly clad man sitting on the porch with a lady in black.

"There he is," said the driver, "the greatest man in Texas.". "Who is it?" said I. "Why, Gin'l Sam Houston." I had a letter of introduction to General Houston, but concluded that this was not an opportune time to present it. but preferred to wait till he was inaugurated Governor, for he was then, with his wife, on his way to Austin to be inaugurated for the last time Governor of the State he had had such a hand in the making of.

But at the dinner table he and Mrs. Houston sat opposite to me, and I got a picture in mind that has never faded. Dressed in a rather rough coat, no collar, but with a red worsted scarf around his neck, and a vest of leopard skin with hair and spots on. General Houston, nevertheless made the impression of great physical and mental power.

He was traveling with his wife in their private carriage towards the city of Austin, but not like us, traveling at night, and we left him at the hostelry. I reached Austin several days before the time for the inauguration, and had an opportunity to hear some of the discussions in the Legislature which showed that even then there were mutterings of the storm that was soon to break over the country. The political majority of the Legislature was opposed to General Houston, and there were fire eaters there who were reported to have left the East for the good of the East.

It was curious, too, to note at that time that almost every one spoke of the remainder of the country as the "States," and at times, on going to REDUCED PRICES ON

BRED BERKSHIRE GILTS



for next 30 days only.

The panic drove hundreds of breeders out of business. The next twelve months will see them tumbling over one another to get back—as the demand and prices advance. I staid in the boat, kept up my herd and advertisements, hence am well equipped for orders. My Berkshires are as fine as the world can produce. Price in easy reach of everyone, Scores of pigs ready reach of everyone. Scores of pigs ready for shipment.

THOS. S. WHITE,

Fassifern Stock Farm.

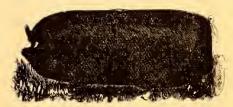
LEXINGTON, VA.

Prize-Winning

BERKSHIRES FOR SALE.

Our herd won 33 ribbons at Richmond 1907, and Lynchburg and Richmond, 1908; also won silver cup offered by American Berkshire Assn. for best under-year herd (3 sows and boar).

We have Masterpiece, Lord Premier, Beryton Duke and Biltmore strains.



BRED SOWS, GILTS, YOUNG BOARS AND PIGS FOR SALE. MOORE'S BROOK SANITARIUM COMPANY, CHARLOTTESVILLE, VA.

LARGE ENGLISH AND AMERICAN BERKSHIRES.



Size, with quality and early maturity. I offer for sale a few of the finest ready to breed gilts and ready for service boars I have seen this season. Also a great number of choice pigs 8 to 10 weeks old. They are out of the best sows to be found in the State and were sired by my great breeding boars, Hunter of Biltmore, 3d and Earhart's Model Premier.

My prices are very reasonable and I guarantee entire satisfaction or refund your money. Write for prices and description to D. E. EARHART, Bristow, Va. will refund your money.

When corresponding with our advertisers always mention Southern Planter.

the post-office for letters, I was told "No mail from the States to-day." The day before the inaugural ceremony, General Houston sent a polite message to the Legislature, saying that he had heard that the galleries in the Capitol (the old one) were unsafe, and that as there would be a large crowd, he suggested that the inaugural ceremonies take place on the portico in front of the Alamo monument. But, in the spirit of pure cussedness, the House sent him word that they would have the galleries strengthened, and did have timber props placed all around under them.

In the morning, I concluded that it would be as safe to be on top as any where, so I went to the gallery. At where, so I went to the ganery. At the appointed hour, the General, still dressed as I had seen him at the country tavern, walked up the aisle to the speakers' desk, and took the oath of office. Then, turning to the assemblage, he said, "Ladies and gentlemen, any one who may wish to hear the remarks I may have to make will please adjourn to the front of the Alamo monument, as I shall speak from that place."And out he walked, with the whole crowd and the Legislature tumbling after him, and, taking off his overcoat and his red scarf, he made his inaugural address just where he intended to make it. And in that inaugural he indicated the policy that he afterwards followed in the shock of war, evidently grieved that the State he had fought for and which he had spent his best days in making a member of the great Union, should be in the hands of those who wished to turn her loose again.

A few days afterwards I presented my letter of introduction, and for the first and last time grasped the hand of the old veteran. Seeing me shrink a little from the lion-like grip of his hand, he said, "My young friend, if you stay in Texas, we will make you tougher than that." I was in Austin at times during the whole of that session of the Legislature and could but see that the old man was waging a

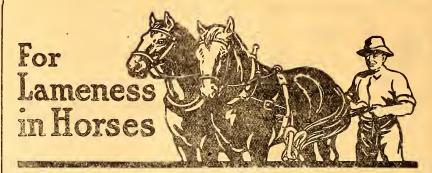
losing fight against that Legislature. But that is history. We did little that winter in railroad building, and the tracks got little beyond Hemp-stead, and when the storm of war seemed about to break I went back to Virginia.

Salisbury, Md. W. F. MASSEY.

CATALOGUES.

J. B. Watkins & Bro., Elmwood Nurseries, Midlothian, Va. Catalogue of nursery stock and ornamental trees, vines and plants. This is an old and reliable firm, who give personal attention to the production of good

W. R. Harrison & Co., Massilon, O. Tornado Feed and Ensilage Cutters. | country.



Much of the chronic lameness in horses is due to neglect. See that your horse is not allowed to go lame. Keep Sloan's Liniment on hand and apply at the first signs of stiffness. It's wonderfully penetrating—goes right to the spot—relieves the soreness — limbers up the joints and makes the muscles elastic and pliant.

Sloan's Liniment

will kill a spavin, curb or splint, reduce wind puffs and swollen joints, and is a sure and speedy remedy for fistula, sweeney, founder and thrush. Price, 50c. and \$1.00.

Dr. Earl S. Sloan, - - Boston, Mass. Sloan's book on horses, cattle, sheep and poultry sent free.

BURKE'S GARDEN POULTRY

WE AND THE THE PARTY OF THE PAR

BARRED PLYMOUTH ROCKS WHITE WYANDOTTES

S. C. WHITE LEGHORNS S. C. BROWN LEGHORNS

EGGS FOR HATCHING

Pens No. 1-Fancy Orpingtons that

HENRY J. and CHAS. G. SANGER,

S. AND R. C. RHODE ISLAND REDS

Manual -MAMMOTH B. TURKEYS FROM WHITE HOLLAND TURKEYS

BEST STRAINS POSSIBLE.

BRED RIGHT, FED RIGHT, GROW RIGHT, STAY RIGHT.

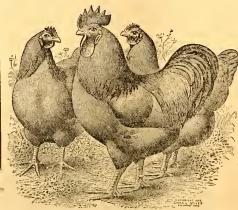
Each breed is reared on a separate farm, under the personal care of a specialist. Our stock is all healthy and vigorous.

YANKEE QUALITY AT SOUTHERN PRICES.

Stock \$2 to \$5 for single specimens. Trios and pens at special prices.

Eggs, \$1.50 to \$5 a setting.

STANDARD-BRED POULTRY FARMS, Burke's Garden, Va.



Proprietors of The Ethermore Fruit and S. C. Buff Orpington Farm. R. F. D. No. 2, DAYTON, VA. The Best All-Purpose Fowls Known

Caswell Co., N. C., Aug. 13, '08. I esteem the Southern Planter a valuable aid to the farmers of this E. B. FOOTE.

Shenandoah Co., Va., June 8, '08. I think the Southern Planter is one of the best Southern papers that we J. D. BURNER.

MORVEN PARK ESTATE.

The Property of WESTMORELAND DAVIS, Esq.

Large Yorkshire Swine.

These pigs are hardy and prolific. The two boars that took the first prize in their classes at the Virginia State Fair had been exposed without cover or shed for a year in the open. They had, as have all our pigs, well developed carcasses, covered with heavy growth of hair that insures against scurf or skin troubles in hot climate. These pigs mature early, are good mothers, and are very prolific. They are the bacon pig of England and of the West.

WE HAVE THE FINEST STRAIN OF IMPORTED BLOOD FOR SALE.

Registered Guernsey Cattle.

Dairymen shipping to the city markets will find a Guernsey bull most valuable to cross on their herds, thus increasing the content of butter fat in their milk or cream. Especially is this cross desirable when shipping to cities where dealers pay upon the basis of butter fat.

At the Pan Amercian Exposition, the only time the Guernsey met other breeds in competition, the Guernsey led all breeds for the most economical production of high-class butter.

We Have Brilliantly Bred Bulls For Sale.

Dorset Horn Sheep.

We have the largest flock of Imported Dorsets in America. They are of one type and both thrifty and prolific.

WE ARE BOOKING ORDERS FOR NEXT YEAR'S DELIVERY OF LAMBS.

For further particulars, address,

LIVE STOCK DEPARTMENT, MORVEN PARK ESTATE,

LEESBURG, LOUDOUN CO., VA

GOOD HOUSEKEEPING. Potato Soup.

potatoes, four turnips, one small onion, five pints of milk, three heads of celery, two teaspoons of salt, one-half teaspoon of black pepper, a large spoon of butter. Boil the turnips until they are tender, add the potatoes and onions and boil until they can be mashed. Drain off the water and cream the vegetables; add the milk, salt and pepper, and return it to the fire and let it come to a boil. Cream the butter very light, and add it just as you take it off the fire. The celery can be chopped and added when you mix the vegetables and milk, or it may be boiled with the potatoes and creamed with the other vegetables. A dust of celery salt and of Cayenne is an improvement. Serve very hot with small squares of toasted bread.

Roasted Turkey.

Always kill the turkey a day before you want to use it (three days is better). It should be picked and drawn at once and hung up in a dry cold place. When ready for cooking plunge it into hot water for ten minutes. Have a dressing made with bread crumbs, salt, pepper, celery seed, a pint of fat oysters, and a large spoon of butter, mixed well, with a few tablespoons of hot water. Fill the body and the crop of the turkey with this dressing. Put it in to the roasting pan with a quart of boiling water and a slice of middling. Turn and baste frequently. It takes from three to five hours to cook a turkey. Thicken the gravy and chop the giblets in it. Serve very hot. Scalloped Oysters.

Drain the liquor from the oysters. Have a baking dish the size you will need. Put in a layer of oysters with a fork, season with pepper, salt and a dash of Cayenne, then a layer of stale bread crumbs, with bits of butter about on it, then a layer of oysters, and so on, till the dish is full. Let the crumbs form the last layer, with the butter, salt and pepper on it, then pour over it a cup of rich milk, or of the oyster liquor. Cover with a tin pan or plate and bake thirty minutes, then take off the top, and bake half hour longer, unless, the dish is very small, then it does not take so long.

Pickled Beets.

Put the beets on in an iron pot as early as you can after breakfast, and let them boil gently until dinner is ready. Cut them up (after rubbing off the skin) into thin slices. Make a sauce of a cup of vinegar, half a cup of water, half a cup of sugar or more, salt, pepper, a tea-spoon of celery seed. Let this boil hard for ten minutes, then pour it over the beets, and let them boil in it. Serve hot.

Cold Slaw.

If you have no slaw cutter, buy They can be had for about fif-

Meat and Food

Chopper

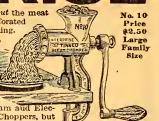
with a revolving steel knife against a perforated steel cutting plate without tearing or crushing. Easily cleaned. Practically unbreakable, and will last for years.

The No. 5 "Enterprise" Chopper costs only \$1.75. No. 10. shown in cut. \$2.50. They are standard family.

sizes, and not only save half the work at butchering time, but are useful in

the kitchen every day in the year.

Made in 45 sizes and styles for Hand, Steam and Electric Power. We also make cheaper Food Choppers, but recommend the above for the reasons given. Illustrated catalog free. Sold at Hardware and General Stores, etc.



Sausage Stuffer and Lard Press

Lessens the labor at butchering time. Two machines in one. Well made and does its work quickly and surely. Cylinder is bored true and plate fits accurately. Pressure cannot cause meat to rise above the plate. The Patented Corrugated spout prevents air from entering casing, ensuring perfect filling and preservation of sausage.

Machine can be changed into a Lard Press in a minute's time. Can also be used as a Fruit Press.

Your dealer should he able to supply you with the "Enterprise" Sausage Stuffer and Lard Press. If not, order direct of makers.



ERP

Bone, Shell and Corn Mill

The "Enterprise" Bone, Shell and Corn Mill is a good, general mill for farmers, poultrymen, etc., and for compactness, strength and durability is unexcelled. Handy for grinding poultry food and making bone meal fertilizer. Mill shown in cut 88.50, weight 60 lbs., grinds 14 bu. corn per hour. Look for the name "Enterprise" on the machine you buy. Grind up dry bones, oyster and other shells, corn, etc., for your hens and watch results.

Other famous "Enterprise" household specialties are: Coffee Mills; Raisin Seeders; Fruit. Wine and Jelly Presses; Cherry Stoners; Cold Handle Sad Irons, Etc., Etc.

Sold at Hardware and General Stores, etc.

Write for "The Enterprising Housekeeper," a book of 200 choice recipes and kitchen helps. Free on request.



THE ENTERPRISE MFG. CO. of PA., 223 Dauphin St., Philadelphia, Pa-

Poland - Chinas.

A superior lot of Pigs by "Top Chief," Gray's Ideal 65805, and other noted boars. ('an furnish pairs not akin to those previously purchased. Come to headquarters and get the best at one-half Western prices. Oidest herd in the State.

Fredericksburg, Va. J. B. GRAY



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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.

11. J. HANCOCK & SON, "Ellersile," Charlottesville, Va.

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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THOROUGHBRED STALLION

Standard Type of the kind to sire Heavy Weight Hunters. Drawing by Geo. Ford Morris.

BUT A SAMPLE!

The above is but a sample of the many superb illustrations contained in our new Catalogue, "Inaugural Announcement." It also contains many other illustrations, showing the Standard Types of the different breeds handled by this concern. In addition to the illustrations and in connection therewith are brief chapters of valuable information pertaining to each breed. This book tells what breeds are the best adapted to Virginia and why they are the best. It also explains in detail the objects and purposes of this concern. It will interest all farmers! It will interest you! Write for one to-day. They are free, and a post card, with your name and address is all that is necessary. Please do us and the publishers the kindness to mention The Southern Planter when writing.

Address the Company as above, or the General Manager.

J. ELLIOTT HALL, Bellevue, Virginia.

FOR SALE.—Combination mare. Park chestnut, some white. Six years old. City broke and safe for a lady's use. Nice in harness. Superb walk, trot, canter mare. A bargain. Price \$300.

teen cents at any hardware store, and not only lessen the labor, but make the slaw much nicer. Shave the cabbage fine, and pour over it a dressing made of one cup of good vinegar, boiled; beat two eggs with onehalf cup of sugar, one teaspoon of mustard, one teaspoon of celery seed. one teaspoon cf salt, a little bit of black and red pepper, a large table-spoon of butter. Beat hard and pour the boiling vinegar over it. Return to the fire and let it thicken. When cold add a cup of cream.
. Scalloped Tomatoes.

Turn the tomatoes out of the can into a pudding dish, season with salt, pepper, sugar, and spread over the top of it a layer of fine bread crumbs with bits of butter about on it, bake for nearly an hour with a plate over it, then allow it to brown for a few minutes.

Candied Sweet Potatoes.

Drop the potatoes into a pot of boiling water and cook them until they are tender. Take them out and drop them into cold water for a minute; this makes the skin slip off more easily. After they are skinned slice them neatly, and spread the slices on a pan. Put a bit of butter on each slice, and sprinkle well with white sugar, and a dust of nutmeg. Put the pan into the stove and let the potatoes brown and glaze. Serve very

Pumpkin Pie.

Peel the pumpkin, and cut it into thin slices, boil in just water enough to prevent its sticking and burning. The best way is to let the pan set on the back of the stove all day and simmer. When they are tender mash them through the colender. To one quart of the pumpkin add one quart of rich milk or cream. One teaspoon of ginger, one of cinnamon, one of nutmeg. The grated rind of two lemons, a pinch of mace, one teaspoon of salt, two teacups of sugar, half a cup of butter, and six eggs, beaten separately. Let it get cold and bake in deep pie pans, lined with rich pas-Just before serving sprinkle with sugar.

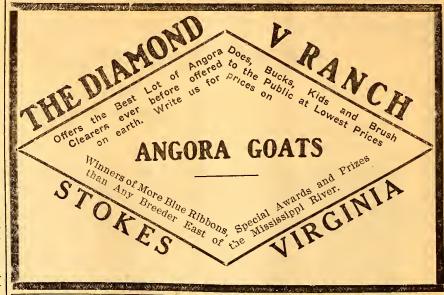
White Caramel Cake.

Six eggs, four cups of flour, two cups of sugar, one cup of butter, one cup of milk, one teaspoon of soda, "and two of cream tartar, juice and rind of a lemon. Filling: Two cups of white sugar, and one of milk, a tablespoon of butter; boil until thick. Pour out and flavor with pineapple or lemon, and beat until it thickens, then spread over and between the layers.

Cheap Fruit Cake. Five heaping cups of flour, two of sugar, one of butter, six eggs, half pound of raisins, half pound of currants, one-fourth of a pound of citron, one teaspoon each of cinnamon, nutmeg and cloves. One glass of brandy. Bake in loaf.

Apple Preserves.

Peel and quarter the apples. Drop





350 ANGORA GOATS

for sale. I have a very fine lot of does as well as some excellent bucks which I will sell at reasonable prices or exchange them for Horses or Mules.

Write me at once,

M. M. SUTHERLAND,

WYTHVILLE,

POLL CATTLE.



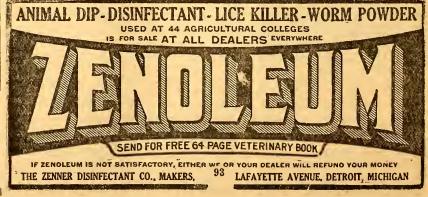
I offer for sale 1 three-year-old bull, 4 cows, 2 two-year-old and 3 yearling heifers; also 3 heifer calves. All regisrered and eligible to registry in Red Poll Herd Book. Choice breeding and in good condition. Fine opportunity for establishing a herd. Will sell lot or single individuals. Foundation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

JOS. E. WILLARD.

Address:

A. C. Bleight, Supt.,

Fairfax, Va.



them for ten minutes in weak lime water. Weigh them and allow three quarters of a pound of sugar to each pound of apples. Sprinkle the sugar over the apples, adding ginger, mace and allspice. Let it stand for several hours, then add water to half cover and put on the stove. Let it boil hard for ten minutes and set away in the kettle till the next day. Boil half an hour and they are ready for use, but are better for keeping a while.

Mince Meat.

Two quarts of cold beef chopped fine. One pound of suet, very dry, chopped, three pints of raw apples, cut in very small pieces, two pounds of seeded raisins, three pounds of currants, one quarter of a pound of citron, shredded, one quarter of a pound of butter, one pint of stewed dried apples, one tablespoon each of salt, cinnamon, alspice, cloves, ginger, nutmeg, juice of two lemons, the yellow rind of two lemons, two quarts of sweet cider, three and half pounds brown sugar, one cup of good brandy or whiskey. Mix well and pack in jars. Pound the spices and cook the currants in a little water for fifteen min-CARAVEN.

HOW TO SAVE \$45.00 IN FATTENING THIRTY HOGS.

One of the neatest and most complete 1909 catalogues that we have received this season has just reached our desk from the well-known firm,

Rippley Hdw. Mfg. Grafton, Co., Ill., manufacturers of whitewashers, cookers, sprayers, prepared spraying mixtures, etc. We note that breeders, fruit

growers and farmers who use their \$5.00 whitewasher claim one man with it will whitewash more buildings, and do a better job, in one hour than five men could do with brushes in the same time. Stockmen that use their cooker claim they save one-third to one-half their feed, and their stock and hogs fatten in one-fourth less time. Examples in their catalogue show how you can save \$45.00 in feed on thirty hogs by using one of their No. 20 Cookers. Their cookers are also used for boiling spraying mixtures, heating hog and poultry houses, work shops, heating water in stock tanks, and for ordering tobacco there is not a better and cheaper machine to use on the market.

The Rippley Co. also sell a full line of poultry supplies, and it will no doubt pay you to get a copy of their 1969 catalogue, and state you saw their advertisement in the December issue of the Southern Planter.

Roane Co., Tenn., Mch. 16, '08. I have a high regard for the Southern Planter and find many things in its columns to interest me.

W. C. SHAW.



Keep Your Saving's Safe.

Money deposited with the Planters National Bank, is not only absolutely safe, but is earning you a liberal rate of interest, and is protected by the LARGEST SURPLUS AND PROFITS OF ANY NATIONAL BANK SOUTH OF WASHINGTON, D. C.

We invite your account. Whether large or small, it will receive the same courteous and liberal treatment that is accorded the thousands of our well-satisfied depositors.

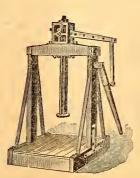
3 Per Cent. interest paid on savings accounts from date of deposit. Write to-day for booklet, "How to Bank by Mail."

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Richmond, Va.

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Every tobacco grower should have one or more of these presses. Save money by using this press; make money pressing for others. The platform of this press is 3½ feet wide and 4 feet long. The height in the clear is 4 feet. The press or jack stand is on top of the beam overhead. This is a very powerful press press.

Many Hundredsof them are now in use in the tobacce

Sections
We sometimes make them much larger for special

work. It is used for pressing in barrels, hogheads and cases, fruit, to-bacco, dry goods, also for tank scrap, etc. It weighs about 560 lbs. The wood work is made of the best hard maple, ash or oak. The iron work is constructed of the best malleable iron and steel, strongy bolted together. Write to-day for FREE BOOKLET and Special Prices.

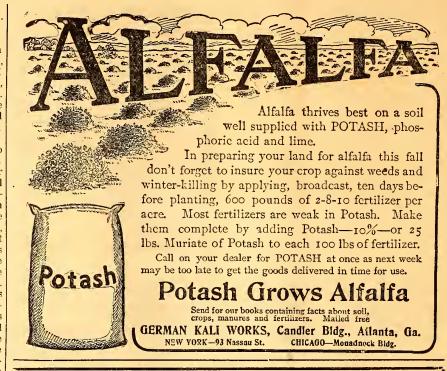
CUTAWAY HARROW CO, 861 Main St., HIGGANUM, CONN.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

A JOURNAL OF EASTERN TRAVEL. Landing in Japan. Article III. By "Traveller."

We had had visions of landing in Japan in Lampans, flat native boats, poled with a back motion, followed by a rigid examination in the customs, and proceeding thence by rickshaws. However, we soon learned that the way of the tourist is made easy, and in the beaten paths everything is in foreign style.

We sped up from our anchorage to the hatoba in a steam launch, did not enter the custom house, and our friends brought us to the Grand Hotel in their carriage. The stormy reception of the Peace Commission which we had dreaded did not occur for the feeling had quieted down very much, and there was a long line of police out to prevent a demonstration. Things looked so entirely natural as we drove up the water front or Bund that we thought it could not really be Japan. The Standard Oil place met our eyes at one corner, the Singer Sewing Machine at another. All the buildings were in foreign style, and the Grand Hotel might be any where in Europe or America. Our friends left us here to rest up for the afternoon. Obse-quious clerks bowed us to our rooms and our trunk came in so short a time that we soon felt entirely settled. Our room "boy," a toothless old man of seventy-five, brought us water and writing materials, and strove to make us feel quite at home by bobbing and smiling. Scarcely had we taken off our wraps when a knock came at the door and Tom, the famous Chinese tailor, arrived with samples of linen, pongee and crepe, patterns and measurements, ready to fit us out in purple and fine linen. The Chinese are important figures in Japan, and are expert clerks and accountants as well as tailors. In the last role they are very successful, and few people can resist them, but we were not prepared at this time to combine dress making with sight seeing. Tom was followed by humbler members of his trade and they in turn by shoemakers, women with embroidery, washerwo-men, maids, or ayahs. Finally, a very elegant gentleman came and said he would like to be our guide, but we politely declined his offer. When we got tired of these visitors, we decided to go out and see something of the place. We went into the court to call two rickshaw boys, and a dozen surrounded us at once. We asked one whose looks we liked if he spoke English and he replied, effusively, "Yes; I speak English," a common, but ill-founded illusion among the Japanese. "What is your name?" we asked, and he again replied, "Yes," which was all we could get out of him, though his running capacity proved excellent. We stepped into the rickshaws, which are small, twowheeled carts, with a cover them, somewhat resembling a baby



SAN JOSE SCAL

Our product for killing San Jose Scale has all the good features and none of the bad ones of other remedies. It is not an experiment in any way.

WE CAN SAVE YOU 50 PER CENT

The first cost of our product is less than Lime Sulphur and large fruit growers report it to be more effectual than any other remedy.

Write Now For Our Free Book

A large fruit grower using 40 bbls. a season who has tested everything, writes us "I will give your product preference over every make."

F. G. STREET & CO., 27 Railroad Street, ROCHESTER, N. Y.



CLARK'S DOUBLE ACTION "CUTAWAY"

WITH EXTENSION HEAD is needed on every farm. It will increase your crops 25 to 50 per cent. This machine will cut from 28 to 30 acres, or will double-cut 15 acres in a day. It is drawn by two medium horses. It will move 15000 tons of earth one foot in a day, and can be set to move the earth but little, or at so great an angle as to move all the earth one foot. Runs true in line of draft and keeps the surface true.

All other disk harrows have to run in half lap. The jointed pole takes all the weight off the horses' necks, and keeps their heels away from the

disks
We make 120 sizes and styles of
Disk Harrows. Every machine fully
warranted. Entire satisfaction guaranteed.

DOUBLE HARROW

Send to-day for free Booklet with full particulars.

CUTAWAY HARROW COMPANY, 861 Main St., HIGGANUM, CONN.

McCOMB & BLOCK

COMMISSION MERCHANTS

ESTABLISHED 1890.



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

carriage, and our little brown ponies, in their blue cotton blouses and loose pants, with straw sandals and mushroom shaped hats, started off. The first sensation of the ride was amusement at being trundled about by a man smaller than I was, but the comfort of this mode of locomotion soon won me over to it. We whisked out of the foreign settlement on the Bund and into the great shopping districts, Benten and Houchi-Dori, with their curio and silk shops. We stopped at an exchange shop and got ten Japan-ese dollars or yen for a five dollar gold piece. The Mexican standard is used throughout the East, and the currency is very simple. The yen and sen are half the value of our dollars and cents. Silver was so high when we were there that we got no exchange on our gold and sometimes lost.

My first impression of Japan was the smallness of things there. Everything seemed to be on a miniature scale. The houses were small, low and crowded together. The streets were filled with ouaint little people, all in draperies, so that it was difficult to distinguish the sexes, except by the different arrangement of their straight, black hair. Their physique was not very prepossessing, their almond-shaped eves give a wierd look to the face which is redeemed, however by their good-natured expression.

We ended our inspection by a visit to Theatre street, which is for all the world like a scene from opera bouffe, with its side shows, booths and stalls. Before the theatres there were the most lurid posters, and ticket agents clamored loudly for natronage, to the beating of drums, which silenced their competitors in other cheap amusements. In the onen booths there were highly colored pictures, masks, charms and other showy gewgaws, as well as sweets and cakes. Boys selling the evening papers ran through the streets with chimes of hells around their waists. Others with strange hieroglyphics on their backs attracted our notice, and we found they were apprentices, wearing the badge of

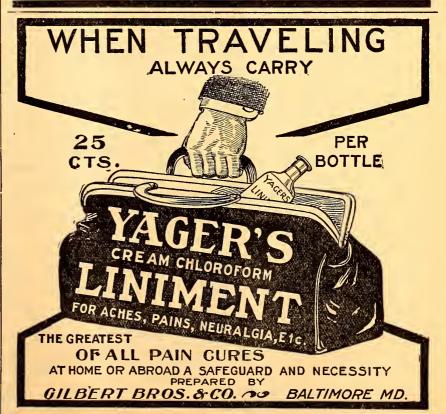
Annual Poultry and Dog Show VIRGINIA POULTRY ASSOCIATION

RICHMOND, VA. DEC. 7-12-1908

A high class exhibition of pure-bred Poultry Pigeons, Pet Stock and Dogs. Exhibits desired. Premium list showing list of handsome special and cash prizes now ready. Write for same to W. R. Todd., Secy., 426 N. 6th St., Richmond, Va.,

We Want You to Attend and Show With Us.

THE BANNER SHOW OF THE SOUTH.



When corresponding with our advertisers always mention Southern Planter.

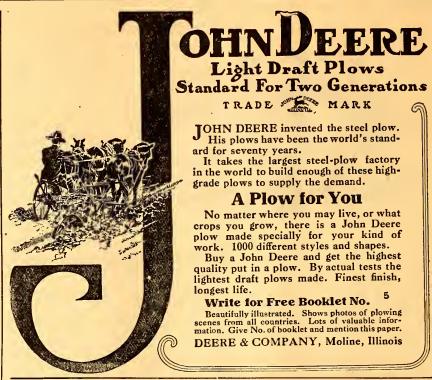
their masters. A shrill whistle announced the blind masseur, groping through the street with a stick. Massage is much used in Japan, and the occupation is left for the blind. Much talk and laughter mingled with the click of high wooden clogs, and the swish of drapery. In the twilight, lanterns began to flash about like huge fire-flies, and soft cries of Kuruma! Kuruma! (rickshaw) resounded through the air as business closed and workers went home.

Reaching the hotel, we consulted our watch and found we had been out an hour. "Ikura?" (how much), we innocently asked our boys. Discovering by our question that we were new-comers, or "griffins" in slang parlance, they promptly answered, "one yen." As we dropped the coins into their out-stretched hands, a lady came up in great indignation and protested. She assured us we were giving them the full fare for a whole day. Even One always has to buy experience. This incident put us on our guard for the future and led to our forming a warm friendship for the lady who protected us. She, with her husband, Col. S., became our guide, philosopher and friend in the East-our peerless Lara.

We next went to the office to have a cable message sent home, informing our family of our safe arrival in Japan, and the clerk asked us please to sign a chit for it. Thus we were introduced to that Oriental system which goes hand in hand with perdition. One can sign a chit or I. O. U. for anything under the sun, from a postage stamp to a house and lot. When our bills came in, we had always several dozen chits, as we had the hotel to pay everything for us. I may mention en passant, that the cablegram which we sent from Yokohama on the afternoon of October 16, 1904, reached our Virginia home on the morning of October 16th, so wide is the difference between Oriental and Occidental time.

The hotels in the East are very satisfactory in their charges, and there are no extras on the bill. paid from 3.00 to \$4.00 per day, which included everything, he baths and afternoon tea. heat, light, Thus we always knew beforehand what our expenses would be. Our first dinner in the East was interesting. The large dining-room was crowded with fashionable patrons, and profusely decorated with pink chysanthemums. A silver epergne in the center of the room held perhaps 200 large vases of them, and each table had shaded pink lights to match, and a cunning dwarf plant of some sort in a pot. A

full Japanese band was playing gaily Some little princes of the blood had the seats of honor. The Marchion-Oyama, with her children, was another striking figure. She stands for the highest development on con-



Cotton and Corn Planters Praise lount's "True Blue" Middle-Breaker

Over 50,000 in Use in Mississippi Alone! Greatest Labor Saver on the Plantations! Here Are Brief Extracts from Letters of Prominent Planters Throughout the South:

Light

Enough for

One Mule

Strong

Enough for

TWO

C. H. Teal, Colfax, La., writes:
"Blount's True Blue' Middle-Breakers are very satisfactory. Their beams are short and you can make smaller turn rows. They take the ground readily. I have been using for 18 years. "Am using over 100 of them."

The short and you footton on land which would have had to lie idle if I had not gotten your 'True Blue' Middle-Breakers."

BurchWilliams, Evansville, Miss., writes: "I consider any land in the Mississippi bottom can be beddeed thoroughly with these plows. I had 50 acres that the cotton was drowned to on and the water grass came up from 6 to 8 inches high. I completely covered this and it decayed perfectly and I made 2,000 busbels of corn that season."

Light

Light

Light

Loundlers, Clover Hill, Miss., writes: "Toosider I have made writes: "The True Blue' is strong writes: "It bind they not been did beam."

L. E. Lea, Brockhaven, Miss., writes: "I consider any land in the greatest labor savers of any plow of them."

James Spencer, Summit, Miss., and it decayed perfectly and I made 2,000 busbels of corn that season."

Light

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Saves HALF in TIME - MEN - MULES!

Hundreds of planters back up this statement.
You'll find their letters in the "TRUE BLUE"
BOOKS-Sent FREE. Write for these books and the Catalog today. Cut the expense of planting and cultivating by using the "True Blue"

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"Kant-Klog" Sprayer

Gets twice the results with same labor and fluid. Send postal today for free interesting booklet, explaining how the "Kantgives

Nine Sizes of Round or Flat Fine or Coarse Sprays

or solid streams all from the same nozzle. Ten different styles of sprayers for all kinds of spraying, whitewashing, etc., etc.

AGENTS WANTED

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When corresponding with our advertisers always mention Southern Planter.

servative lines of the New Woman of Japan.

Many Americans were present, and the smiling countenance of William J. Bryan cast a glow over one end of the room. He was making the same trip as we, and at every place where he stopped, he was well re-ceived and royally entertained. Our boy pulled back our chairs, and handed us the menu, with a low bow. We looked it over and discovered a queer name which we knew must be Japanese, and we ordered it, but could not eat it when it came. Here we asked for "consomme," but the could not understand, brought the steward, an Englishman, who asked us please to order by the numbers after the things, as the boys could not understand the names. Then we noticed for the first time that everything on the menu was numbered, and we dined off of 7, 10, 13, 17 and 21. Seventeen was pea hulls, a new dish to us, and not very nice. They are pulled before the peas mature, are boiled and seasoned with butter. Other Japanese dainties we got acquainted with were bamboo sprouts and lily roots, both very edible. We never cared very much for the fruit, though the persimmons are large and look pretty. They serve a quantity of mandarin oranges, fresh figs, grapes and apples.

We soon found ourselves pleasantly launched out into the life of Yoko-It is such a gay, amusing place that many travelers cannot tear themselves away from it, but pass their whole visit to Japan in the big carved chairs and sofas of the Grand Hotel. We would sit for hours on the terrace, watching the passing show. Outside there were jugglers, singers, dancers and dwarfs to amuse us. Peddlers brought their packs, and Singalese jeweler a tempted us with his unset stones. Before us lay the bay with the ships of the nations upon it, and behind us was glorious Fuji-yama, the sa-cred mountain of Japan, a volcanic peak, 13,000 feet high. After getting a view of this peerless mountain, we felt that its beauties had been very inadequately depicted on China, fans and screens. The Japanese hold it in great honor on account of the legends and traditions associated with it. About 18,000 pilgrims ascend it annually. The base is cultivated up to 1,500 feet, and above this is a grassy moorland for 4,000 feet. The summit consists of a series of peaks, surrounding the crater, which is 2,000 feet in diameter. Painters and poets find much to admire in the union of grace and majesty which it presents.

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THE FAMOUS BLUE-GRASS REGION.

290 acres of the finest bluegrass land; large stone house; fine barn and outbuildings; excellent orchard; running water in every field; well fenced; beautifully located only four miles from the railroad by excellent roads. No better stock farm in the state. Price, \$19,000; terms if desired.

180 acres of excellent blue grass land and most conveniently located; brick and stone buildings and in good shape; well watered and fenced; good orchard. Price \$13,500

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erty. Price \$12,400. Easy terms.

150 acres of fine blue grass land; with good improvements; splendid orchard; well watered and fenced and desirably located. Price \$9,000. Terms if desired.

325 acres of fine quality blue grass land; convenient to Round Hill; large brick house; good barn and outbuildings; well watered; fine neighborhood. This would make a magnificent stock farm. The cheapest really good property in the county. Price \$7,500. One-half cash and the balance in two and

three years.

120 acres of good blue grass land; improvements fair; only 4 miles from good town on the R. R. Price \$6,000

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Most Conveniently located and Nearest Washington City.

550 acres and over, with good improvements; large frame dwelling, and all necessary farm buildings; excellent soil, and splendidly watered. This is without doubt naturally the best stock farm in Fairfax County. Price \$13,000. Terms reasonabe.

reasonabe.

130 acres well improved and in good condition; fine location; good water and orchard. Price \$10,500.

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227 acres ...ell improved and conveniently located; stone house; fine blue grass land. This farm with all stock, farm machinery and household goods is

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A Japanese poet speaks of it as "Great Fuji-San, towering to the sky."

While idling in Yokohama, we picked up some bits of the Japanese language, which proved very useful to us in our travels. Knowing one important word will often save the situation. The language is soft and pretty, and has many sounds resembling Italian. It abounds in horrofics and humilifies. Everything pertaining to the first person is vile and despicable, whilst everything relating to the second person is honorable and praiseworthy. The construction of the language shows all the windings and turnings of the Oriental mind, and translated literally

English would make utter nonsense For example, "Don't do that" is translated "Honorably abstaining condescend," and "Excuse me" is "August, pardon, deign." A foreigner talking with a Japanese lady through an interpreter found that her name was Miss Nightingale. Aiming to be very gallant, he said, "I wish I could put you in a golden cage and carry you away." When the interpreter translated his remark, the lady became very cool, and the polite foreigner did not discover until long afterwards that his remarks had been translated, "I wish I could shut you up in a box."

The Japanese read a great deal, but literature is at a low ebb with them. Its place is supplied by charming myths and folk lore. Poetry is highly esteemed, and in the olden times, women were prominent in this vocation. The censorship of the press is so severe that the jails are full of editors. Nothing is more common than a notice that a certain paper has been stopped by Imperial decree.

The Temple Pump Co., of Chicago, is the pioneer in the manufacture of the Multiple Cylinder Gasoline Engine. The "Master Workman," a double cylinder gasoline engine, was the first on the field. Now, the whole course of progress in the making of gas engines is towards the multiple cylinder type, engines of two, four, six, and eight cylinders being made. The Temple Pump Co. are now manufacturing two and four cylinder engines for general farm use.

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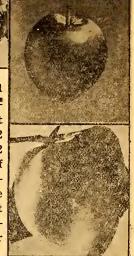
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Write us now, and by return mail you will get coupon good for \$1.30 of the \$2.30 which is the regular price of the ten trees. Such a bargain is so unusual that you should not fail to take advantage of it. Don't put it off—send today!

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APPLES, CHERRIES, NECTARINES, GOOSEBERRIES, RASPBERRIES, ORNAMENTALS,

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All inquiries must reach us by the 15th of the month previous to the issue, or they cannot be answered until the month following.

SOWING APPLE AND PEAR SEEDS.

Will you please state in the next issue of Southern Planter the best time for planting apple and pear seeds to raise seedlings for grafting nurnoses.

J. F. PHIPPS.

Ashe Co., N. C.

The seeds should be sown as early in the spring, as the frost is out of the ground. The soil should be well prepared and the best is a loamy soil about five or six inches deep. Do not cover too deeply. Sow in rows and keep cultivated during the summer so as to encourage growth. They should be planted out in the nursery rows the following spring.-Ed.

TO REMOVE WARTS.

We have a fine mule that has two warts on it: one on its ear, and one on its side about the size of a quarter. Will you please give a remedy for removing them.

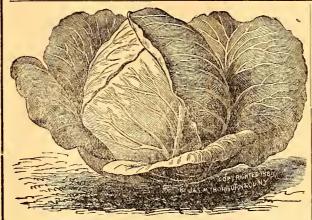
A. M. ALLEY. Rockingham Co., N. C.

If the warts are attached to the skin by a hard dry neck, clip them off with a pair of scissors, or cut with a sharp knife, and touch the root of the neck with lunar caustic. If the neck is a soft fleshy one, tie a silk cord tight around it as close to the skin as possible, and thus cut off the supply of nourishment to the wart, and it will die and drop off. If the warts are flat hard substances, lying close on the skin, burn them off with caustic potash, or lunar caustic .- Ed.

PIGS COUGHING-LAME COLT.

I see in your valuable paper an in quiry in the September number of Mr. A. E. Royall, asking as to what to do for his pigs. I will give him my experience. I had some affected the same way, and I found that allowing them to stay under the barn, where there is so much dust, getting in their throats, causes them to cough. I stopped mine from going under the barn and stopped the cough. Another inquirer, Mr. Oliver Coleman, asks about his colt. I can give him some experience also. If he will have a shoe made with a piece of iron about half an inch welded on the toe of the shoe extending up on to the hoof about one inch, and put these shoes on both front feet, and allow the colt to walk around, this will correct the trouble. I had one shod in that way, and it came out all right, and had beautiful feet. As the feet came back I increased the size and weight of the piece on the toe of the shoe.





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CLAUDE G. STEPHENSON,

Rainey. Herndon, Va.)

saw these inquiries as I was looking for some information which is always to be found in the Southern Planter. I consider it the best paper printed. One copy I sent to my sister, Mrs. W. R. Capehart, of Avoca, got you lots of subscribers, which I was glad to see, when I went over there. Wishing you grand success. D. G. BOND.

Chowan Co, N. C.

RESTORING FERTILITY.

I am a merchant here, but have recently bought a small farm, more to divert my mind from business than anything else. I have been taking your farm paper, and have been following your teachings as near as I could, and have always found them profitable. I find that as a fertilizer nothing will equal stable manure, but it is not always convenient to get it in the quantities I want. What I want to ask is, Is there any combination of fertilizers that will add humus to the land and that will equal stable manure? Will commercial fertilizer and legumes turned under do it? I will appreciate it if you will write something bearing on this in the Southern Planter, or if you prefer, write me direct.

"X." Tennessee.

There is no fertilizer of a commercial character that will directly add humus to the soil, but through the proper use of the legume crops one can add humus more rapidly through the use of the proper fertilizers for them, than he could ever hope to with stable manure. And the growing of these crops will give him the food material that will enable him to make more manure, for while the turning down of a legume crop will at once add more humus-making material to the soil, it is always better economy to mow and use the crop as feed, for you can save at least eighty per cent. of the manurial value, and get the feeding value, too. I have tried to put this matter in plain language in my last book, "Practical Farming," and you can get more from that than in many letters. Adopt a short rotation in which peas and clover come in frequently on the land, and always have a cover of some growing crop on the land in winter to save nitrates that would be washed out, and to restore humus-making material in the spring for the hoed crops. Then use a manure spreader to make your manure go further, and you will soon be able to cover a cornfield with manure annually. When you arrive at that point, the way is clear.

W. F. MASSEY.

FERTILIZER FOR GRASS.

Would you please guide me in the following? I run a small dairy, and have a fairly large pasture (about five or six acres), which does not

Buy Hot-Bed Sash NOW and Grow Garden Stuff for Early Market



45 - Light Sash 3 x 6 ft., 1% thick, Complete with Glass, .69 Dealers'

Don't quit the game just when the biggest profits of the year are in sight. The early vegetable market is the cream of the entire season. We will sell you the necessary Hot-Bed Sash AT 50 PER CENT BELOW LOCAL DEALERS' PRICES. Use them to extend your growing season right straight through to the time when prices are highest. Use them for wintering flowers, by protecting the seedlings. Use them for Cold Frames, after plants are well started. Use them to keep the chickens warm during the cold snaps of winter, and spring will find your Hot-Beds ready to force the early vegetables on the market at fancy prices.

Genuine Cypress Sash, 3x6 ft., with 45 Lights of Glass, at Less than Dealers Ask for Ordinary "Open" Sash

Gordon-Van Tine 45-Light Hot-Bed Sash will enable you to grow vegetables from January to January. They are a wonderful improvement over the old-style sash. The 45 overlapping lights produce a Hot-House temperature perfectly.

The sash are genuine Louisiana Cypress. Glass rut in with putty and points. Bars firmly secured to bottom rail. Entire sash coated with Pure Linseed oil. Our orice for the sash, complete with glass, ready for immediate use, is less than retail dealers ask for ordinary unglazed sash. We carry a tremendous stock, and ship to gardeners everywhere, under a guarantee of Safe Delivery and Satisfaction. Save time by ordering direct from this advertisement!

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MANUFACTURER TO FARMER CHEAP

No Agents Lime Screenings and Run of Kiln.

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yield much grazing, but seems full of small white clover. I expect to leave this farm next fall. I want you to tell me what fertilizer I should use to produce me a heavy crop of grass and clover on this pasture during next spring and summer. If I use bone meal when should I apply it to have the full benefit of the application? What fertilizer should I follow up with in the spring. I intend pasturing some rye until the grass gets ahead good.

CHAS. JEWETT. Princess Anne Co., Va.

Under the conditions you name I hardly think it would pay you to use bone meal largely, since you expect to keep the place but one season. The best thing to encourage a good growth of the grass will be to apply about 100 pounds per acre of nitrate of soda as growth starts in the spring. This will be used at once, and will rapidly encourage the growth of the pasturage, and will answ your purpose better than anything I can suggest otherwise.

W. F. MASSEY.

OAT GROWING-GRASS SEEDING.

I have a field that I wish to seed in oats in the spring. The field was in corn this year, made about forty bushels per acre without any fertilizer. The land has been in cultivation three years: one corn crop, one rye crop, and one corn crop. White oak timber and black soil. Do you think it will pay to use fertilizer on this land? Fertilizer is costly here, as we have to haul it twenty miles. A fourteen per cent. phosphate costs \$20.00 per ton here.

Would you use a grain drill to seed oats in spring? Is it safe to sow clover, timothy and red top in March, or would the frost kill it?

J. M. STEPHENS.

Patrick Co., Va.

1. After taking three grain crops from the land without returning anything to it, it is not at all likely that you will be able to secure a satisfactory third crop of grain without giving the land some help. The practice of following one grain crop after another for several years is bad farming, and ought not to be followed. Each grain crop should be followed by a crop to feed the land, and if you had followed the first corn crop with a crop of crimson clover seeded in the corn at the last working, and plowed this down, or cut into the land with a disc or cultivating harrow in May or June, and then planted cowpeas for a fodder crop, and followed this with crimson clover again for a winter cover, you would now have had a piece of land which would have made you a better corn crop than ever before, and this at very little cost beyond labor, and that would have been more than repaid by the



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Prepaid Let me tell you something: I'm making a quotation on the Galloway Wag.
on Box Spreader so low that farmers allover the country are taking notice—and sending in their orders while they can get them at this figure. The name—

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is a guarantee of manure spreader excel-lence all over the United States—and every one of my Spreaders is backed by my \$25,000

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Here are four things to remember in connection with the Galloway:

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3. My own Factory turns 'em out—capacity, Seventy Complete Spreaders a day.

4. I make you a price that sells them. That price is the lowest ever made on a first-class Manure Spreader. But hefore you risk one cent on my Spreader I send it to you to try 30 days free.

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or high-wheel wagon, and is made in 4 sizes, up to 70 bushels. My big, Free Spreader Catalog and my Special Red Hot Proposition are waiting for you—Spend a cent for a postal today and get your name to me at once. Fil make you the lowest price ever offered on a first-class Spreader—Freight all paid—and show you how to clean up \$50.00 clear cash profits. Write me personally—TODAY.

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cowpea hay crop. The proper time to have used acid phosphate on the land was for the pea crop, and this would have given you a return both in the pea crop and the corn crop, which you propose to plant, which would more than have paid for the outlay in phosphate, as if applied at the rate of 300 pounds to the acre, it would only have cost according to your statement, \$3.00 for the acre. We believe that it would pay you to apply this quantity to the land when preparing the same for the corn crop, and the earlier it is applied the better. It will not leach out. Sow crimson clover in the corn at the last working, and follow the system of giving the land at least one legume crop for its recuperation each year. and better two, and you will be able to maintain its fertility with but lit-tle fertilizer, especially if you will feed one of the legume crops with the straw and fodder of the grain crops to stock and carefully save the manure and apply it to the land each year.

2. You can safely sow clover and grass seeds in March, though it is better to sow them in August or September, as they then make a safer stand.—Use a grain drill in seeding the oats.-Ed.

ALFALFA-HUMUS MAKING-LIME-CORN GROWING.

Your correspondents usually omit one very important item in their prescriptions and experiences. fail to state on what kind of soil they are performing.

Do you know whether alfalfa can be grown successfully on stiff red soil, mixed with a sort of granite gravel, and at an altitude of a hundred feet above the river and creek bottom lands?

2. Which would add the most humus to land: a pea crop that would yield two and one-half tons dry hay per acre, plowed under green, or fifteen tons livery stable manure?

3. Would the green crop add more useful material to the soil than the dry hay, and how much?

4. Does unslaked lime lose usefulness to soil when piled in field and allowed to get wet so often that it goes into small harsh lumps instead of powder (as it does when only once slaked)?

5. Is it possible to add manure and commercial fertilizers enough to land in one year to make land produce 100 bushels of corn per acre instead of thirty bushels?

C. E. BLUE.

Albemarle Co., Va.

Experience has shown conclusively that alfalfa can be most successfully grown on stiff red soil, if only this soil is in a good mechanical and physical condition, well drained, and supplied with lime, and in a good state of fertility.

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The Forward Truck does away with all of the annoyance on the team of the old "tongue"—all neck weight—side draft and sore necks. Note back of the Disc Blades the TRANSPORT TRUCK an extra attachment—upon which you can mount the machine, taking the Disc Blades off the ground, so you can drive over stony ground, rough and sandy roads, hridges, etc. Write today for our price—proposition to you and new 1908-9 Catalog sent FREE.

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Lightest Draft

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622 Hastings St., Detroit, Mich.

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It Crushes, Cuts, Lifts, Turns, Smoothes and Levels in One Operation

Yet it puts less strain on the horses than any other harrow, owing to the sharp, sloping knives. The knives cut through the sod or stubble turned under by the plow, leaving the trash helow the surface, while other harrows drag this to the top, where its fertilizing value is wasted.

Also Best For Covering Seed. The curving coulters turn every inch of the soil. Made in different sizes, from 3 feet to 17½ feet in width.

Examine the Acme at your dealers. If not there, we will ship direct.

Write for Catalog and Valuable Book on "Preparation of the Soil." Free to you.

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Chicago Flexible Shaft Co. 110 Ohio St. Chicago.



2. The pea crop would supply the most humus-making matter, as livery stable manure is always very largely dung, and contains but little straw or other vegetable matter. The livery stable manure would supply more plant food, but without a sufficiency of humus in the soil, this cannot be made fully available.

3. The only difference between the two is that the green crop contains a larger proportion of water, and this, beyond sufficient to cause the vegetable matter to decay, adds nothing of value to the soil.

4. Yes, very largely. When lime gets into the condition you describe, it is practically mortar, and only very slowly disintegrates in the soil. The sooner lime is spread and mixed with the soil after it is slaked, and the more effective it is.

5. Yes. This has been done, but never with profit in the crops.-Ed.

LEG WEAKNESS IN CHICKENS.

My chickens, when they get to be frying size, get so they have no control of their legs. They do not seem to be sick, for they eat heartily, but they can't walk. Since spring I have had them like this. At first, I would kill them, then I let them alone, right many became all right after three or four weeks. Will you tell me what is the trouble, and how to remedy it?

MRS. PEYTON HUNDLEY. Essex Co., Va.

Leg weakness is the cause of your trouble. This is usually most troublesome in chickens raised in bottom-Chickens want a heated brooders. Usually cool floor and warm above. after the chickens get on to the natural ground the trouble ceases. In your case with chickens frying size, we think the trouble is caused by the absence of mineral matter in the teed. Feed some bone meal in the mash two or three times a week. Chickens like all animals when growing, need mineral matter to make strong bones. The phosphate of lime in the bone meal supplies this.-Ed.

SHEEP HUSBANDRY-SWEET PO-TATOE-IRISH POTATOES-ALFALFA.

1. What, in your opinion, is the best breed of sheep for this section of Virginia (central part)?

2. What are the chief valuable characteristics of Southdown Shropshire, Cotswold, Dorset, Hampshiredown. Merino?

3. What is the best kind of soil for sweet potatoes, red or gray? For

Irish potatoes?

4. I have about half an acre of very fine land I want to try alfalfa on, but it is taken with rich weed. How would this do: Put in Irish potatoes; then, as soon as they are dug sow cowpeas, and turn the latter un-

idebaher

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der in early fall, when ready to put in the alfalfa?

X. Y. Z.

Buckingham Co., Va.

1. We are of opinion that the Shropshire is the best breed of sheep for Virginia, except where the prime object is the production of lambs, for the early market, in which case Dorsets are the best. The Shropshire has acclimatized and maintained his size and vigor better in this climate than any other of the breeds.

2. The valuable characteristics of the Down breeds (Southdown, Shropshire and Hampshire downs) are the high quality of the lamb and mutton produced with a good salable fleece The Dorsets are valuable of wool. as early lamb producers, and make fine fat lambs. The Cotswolds have not, in our experience of them here, maintained their size and vigor. They have too long wool for our climate. There are few now kept here. The Merinos are valuable as wool producers. Among the Down breeds the Southdowns are the smallest, but make the primest mutton, the Shropshires come next in size. Hampshires and Oxfords are the largest.

3. A sandy loam is the best soil for Sweet and Irish potatoes. The Sweets do best in a light sandy loam; the Irish in a loam of heavier texture.

4. You must get rid of the weeds before you can grow alfalfa. The plan you propose should enable you to do this, but we would suggest that instead of plowing the cowpeas down, you cut them off for hay, and then cut the stubble lightly into the land with a disc or cutaway harrow. The deep and thorough preparation for the Irish potatoes should cause most of the weed seed to come near enough to the surface to sprout, and the cultivation of the crop would destroy these. Those left the cowpeas should smoother, and by not plowing the crop in, you avoid bringing up weed seeds again to bother the alfalfa. Dr. Stubbs found this method of preparing the land after a cowpea crop to give him a clean stand of alfalfa.-

DRAINAGE-WILD ONIONS.

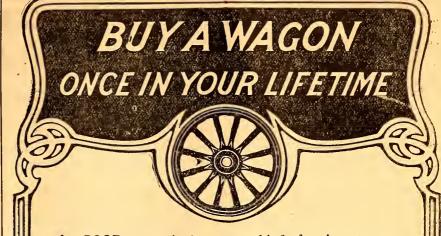
1. Will you kindly have some articles on field drainage during the year?

2. Does anyone know how the taste of wild onions can be removed from milk?

G. H. GOODE.

Chesterfield Co., Va.

1. We will endeavor to comply with your request during the winter months. In this issue in the article Work for the Month you will find some advice on the subject. The first step to take is to have levels



POOR wagon is the poorest kind of an investment. There is too much hard work to do, the loads are too heavy, the roads are too rough and the wear and tear too great for a wagon of inferior material and poor construction to stand the strain. It is the wisest policy to buy a wagon that has a record as a durable wagon.

If you are about to purchase a wagon why not assure yourself in advance of long, satisfactory service by buying one of the well known and dependable I. H. C. wagons?

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The two first named wagons are old timers, well known all over the country as of superior build and material and giving long satisfactory service. The Weber wagon has been manufactured 64 years. Many a farmer is able to testify that his Weber lasted him all the years of his active farm life. And as many more farmers are using the first Columbus wagons manufactured. These are standard high grade wagons, and there can be no possible mistake in purchasing them.

The New Bettendorf is the all steel gear wagon, practically unbreakeds. It is the wagon for all clienter and on proving the standard proving the stan

breakable. It is the wagon for all climates and a guarantee against

breakdowns and repairs in all kinds of heavy work.

Why not make sure of long wagon service? There is no better place to begin than with the International agent in your town. Go and see and talk wagon to him. He will supply you with c ttalogs and give you all needed information. Or write direct to the Home Office.

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taken, and a plan laid down, so as to ensure that when done it shall be effective. There is a little book written by Dr. Chamberlain, price thirty-five cents, which gives full in-structions on the subject, which we can supply.

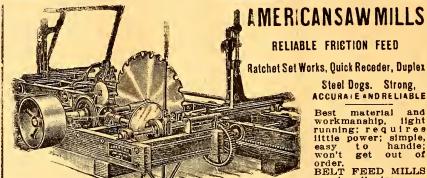
2. There have been many attempts made by different methods to get rid of the onion flavor from milk, but with only partial success. The best, probably, is to heat the milk (not boil it) as soon as drawn, and then pass it over an aerator. The odor is thus volatilized, and largely got rid of.-Ed. i.

SHEEP HUSBANDRY.

Please advise an inexperienced person how to commence raising sheep. I have sufficient feed and pasture for 100 or 200.

King William Co., Va.

A man who has had ro experience with sheep should begin in a small way, and gradually grow into the business, and thus learn the requirements of a flock. Twenty-five ewes and one buck are plenty to start with. These should be preferably grade Merino ewes, and great care should be taken to get them from a section where there has been no trouble with the stomach worms. These parasites are the great hindrance we have to successful sheep husbandry in the South. If a flock is once infested with them profit is at an end. Sheep from the mountain sections of Western North Carolina, East Tennessee, and West Virginia are the most likely to be free from this infection. The ewes should be one- or two- year-old sheep. Don't buy a sheep with a broken mouth; that is, to say, with her teeth worn down or lost. They her teeth worn down or lost. They usually begin to show this condition at five or six years old. With the ewes a pure-bred buck should be mated in September. The buck may be either a Shropshire or a Dorset. Either will get lambs which will be ready for the market in the early spring, when prices are the best. The Dorsets are probably the best for the very early lambs, as Dorsets and Dorset grades will take the buck earlier than other breeds, and can be so managed as to produce two crops of lambs per year, though this is not a desirable practice to be continued



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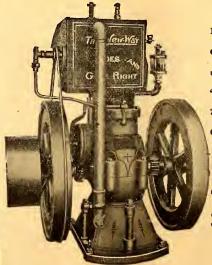
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You will agree that this is the most liberal offer ever made-

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E 13&14 D 10 & II and give you the benefit of saving their profits. You can prove, too, at our risk, that the Quaker City

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Write for the book now and pick out the one you want to try. Convince yourself that it grinds faster, does better work, needs less power, less attention, and meets a greater range of requirements than any other grinder at any price. From grinding ear corn to making Graham flour—grinds soft and wet as well as dry corn—you'll find a Quaker City superior. If not, send it bac! at our expense. Try all mills, if you like, and keep the best. That's all we ask.

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Which put them still farther cently, which put them still farther ahead of any other mill—although the price would have to be higher than before if sold through dealers-yetyou can get one now for less,

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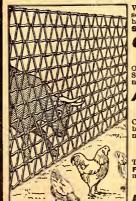
pocketbook. Write today-now. 3737 Filbert Street W. Philadelphia, Pa.

regularly. Three crops in two years is as much as ought to be attempted. The ewes, if bought now, will have been served, and a buck need not be bought until next August. The ewes should be given a good pasture through the winter and be fed a lit-tle grain, oats, peas and a little corn are best. Give a pint per head per day. A shed, open on the south side

is all the shelter they require. In this a rack should be fixed, in which pea hay or a mixture of pea hay and good meadow hay should be fed. Do not put more hay in the rack at one time than the sheep will eat up clean in a day, as sheep are fastidious eaters, and will not touch hay that has been picked over by them or by other inimals. Let them have pure water of drink, and give them salt once or wice a week. In the shed keep a rough in which a mixture of cut topacco leaves or tobacco dust and salt hould always be kept. This will revent and clean out the worm paraites. When the ewes are near lambig, cut off the grain almost entirely, iving only oats and a few peas unil after the lambs are dropped, and ne flow of milk is established, and ne lambs are taking it freely, then sume the mixed grain ration in full nd increase as the lambs grow. A ew pasture of crimson clover ad mixed grain is the proper lace on which to put a flock of wes and lambs, and ought to be alays provided. Do not make this

sture too large, but rather have vo or three smaller fields, and

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GET OUR FREE SAMPLE which we send for inspection. Test it for GET OUR FREE SAMPLE which we send for inspection. Test it for strength, stiffness and rigidness, then look to the galvanizing. File it and see how thick that is. We want you to satisfy yourself that for YOU Brown Fence is the best fence to buy for Horses, Cattle, Sheep, Pigs, Chickens, etc. Our fences are made of extra heavy Steel Wire—both strand and stay wires No. 9 gauge.

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The Brown Fence & Wire Co., Dept. 68 Cleveland, Ohio.

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change the sheep every two or three days. Change of pasture as frequently as possible is essential to success with sheep. Better change on to a poorer pasture than not to change at all. The lambs should after they are two or three weeks old, always have a clover or grain pasture to which they can resort apart from the ewes if the greatest success is to be attained. The lambs should pick this over first, and then the ewes follow them, and another field be given up to the lambs. Creeps through the fences should be made so that the lambs can have access apart from the ewes, but yet be able to return to the ewes to suck whenever they desire. In this way fat lambs can be had for the market when they are two or three months old. The lamb that sells the best in the early market is a fat one weighing not over forty or fifty pounds. The lambs should be weaned when four of five months old, and the ewes be put on a poorer pasture until they loose their milk. After this they may be gradually got into good condition again, ready to take service in August, September and October. The period of gestation in the ewe is five months. The ewes should be shorn of the wool in May. A flock of ewes should easily pay a profit of 75 to 100 per cent. per year if well cared for.—Ed.

ANALYSIS OF SOIL—FERTILIZER FOR CORN—IRISH POTATOES—CONSERVING THE VALUE OF MANURE—POULTRY MANURE—TO PREVENT WASHING OF LAND.

1. Is there any place in Virginia where we can send samples of our soil for an analysis to determine what plant food it is most deficient in.

2. I expect to plow under a crop of rye on one piece and vetch and oats on another, using both for corn another vear. What fertilizer, if any, would be best to use? The soil is a gray loam with a good deal of sand, light chocolate subsoil.

3. Will Irish potatoes do well on new land, or should the land be cultivated a year or two first?

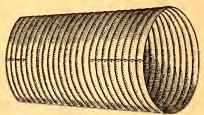
4. Where you have plenty of stable room so you can keep adding fresh bedding on top of the manure all winter, does it pay best to leave manure in stable or keep it cleaned out and haul right to the field where you have to put it on top of the land and not plow it in until spring?

5. I sprinkle lime and ashes in my poultry houses three times a week and then once every two weeks rake it all out clean. Does the lime and ashes waste the fertilizing qualities of the poultry droppings or conserve same?

6. Will some reader of The Planter give me a remedy for the unsightly hillside ditches that will save my

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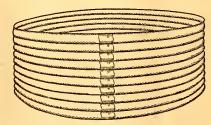
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lasting" line of Corrugated necessities.

Write now telling us of your wants, stating sizes desired, and we will send literature and enticing quotations. "Twill pay well to learn more of the "Everlasting" line. Better start to-day!

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ASHTON STARKE, Richmond, Va.

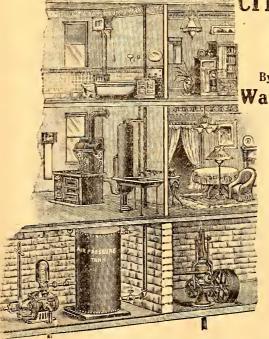
Mention this paper.

Iron Fencing a Specialty.

land from washing on our steep hill-W. S. CARRINGTON Amherst Co., Va.

1. Yes. Send the sample to Dr. Magruder, the Chemist of the Department of Agriculture, Richmond. As we frequently said, we do not place much value on an analysis of soil to determine how it shall be made productive. The chemist in his laboratory can find constituents in the soil and determine approximately the quantity which the plant cannot make available because unable to control the conditions affecting the same. The true way to analyze the soil is to lay off experiment plots and treat each one with different elements of fertility, give one nitrogen, one phosphoric acid and another potash, then give still another nitrogen and phosphoric acid, and another nitrogen and potash, and another a mix-ture of all these constituents, and put the same kind of crop on each plot and the plots will answer the question as to what the soil needs to grow that crop successfully. The chemist cannot tell you this.

2. The rye will only add humus to the soil, the vetch and oats will supply nitrogen and humus. On both plots we would apply acid phosphate, say, at the rate of three hundred pounds to the acre. On the rye plot probably some nitrogen in the form of nitrate of soda would also be of service. The acid phosphate can be applied at any time during the preparation of the land for the crop, but the nitrate of soda should not be applied until the crop has started to grow. The acid phosphate will not leach out, the nitrate will, unless there is a crop to utilize it at once. As you are doubtless aware, we have always doubted the advisability of applying commercial fertilizer of any kind to the corn crop. By doing it you may and probably will increase the yield of the crop, but it is rarely that the increased yield pays for the fertilizer. You can improve the fertility of the land, but must look for



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the profit in subsequent crops. Barn yard manure is the proper fertilizer to use to grow corn applied on a clover or pea fallow. Phosphatic fertilizers will pay on the clover and pea crops and these and manure will make a profitable corn crop.

3. No. You will not find the Irish potatoes will do well on new land. The plant food in the soil is not in a sufficiently available form to meet the quick needs of this crop. A crop of corn will usually be the best thing to put on new land, as its extensive root system enables it to search out and utilize the inert plant food and the cultivation necessary for the crop makes this fertility more available and puts the land into a better mechanical and physical condition for the next crop.

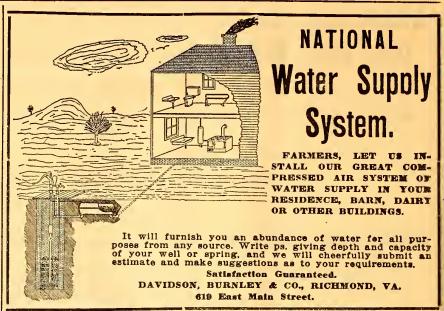
4. The best way to conserve the value of stable manure is to get it out on the land as fast as made. No loss of its value is caused by leaving it spread on the top of the land during the winter. Where this cannot be conveniently done, then, leaving it in the stable, trod down solid, conserves its value best, but this practice is not compatible with the best hygienic condition of the stable, and it is absolutely fatal to successful dairying. The stables and cow barns should be cleaned out daily and the manure either be spread on the land or be put up in a compact heap under cover or be covered with soil as piled, or, if a covered barn yard is available, it should be put there and cattle be kept on it to compact There is no doubt the most economical way to handle the manure is to have it dumped directly from the stables and barns every day into the manure spreader and put it on the land at once. It is then only once to handle and no portion of its value is lost. Add to the manure as made forty or fifty pounds to the ton of acid phosphate. This will make it twice as valuable as a fertilizer.

5. The sprinkling of lime and ashes on the hen manure causes loss of the ammonia (nitrogen), the most valuable part. Dry dust or dust and land plaster mixed conserves it best.

6. The way to prevent washing and gullying is to plow deep into the subsoil. Give the water the chance to ge into the soil and it will take care of all of it and no washes be seen.—Ed.

Albemarle Co., Va., Feb. 8, '08. It gives me very great pleasure to get a new subscriber for the best farm magazine of North America. If it were possible for it to do the States could make no better investment for the agricultural advancement of the Commonwealth than to appropriate a sum sufficient to place one year's subscription to the Southern Planter in the hands of every Virginia farmer.

DR. WM. FITZHUGH CARTER.









Clemont Co., O., May 4, '08.

I am very much pleased with the
Southern Planter and renew with
pleasure. RUBEN WAITS.

Gloucester Co., Va., Apl. 28, '08. We would not be without the Soutlern Planter for anything.

G. W. SMITH.

The One and I. By Elizabeth Free-mantle. Published by Gerge W. Jacobs & Co., Philadelphia, Pa. A pretty little story in the form of a diary. The plot is slight. The scene is laid in the Canadian Northwest. A clever young English girl is engaged to a "cowboy," whom she calls "The One," but she has literary aspirations, and yearns, at times, for the civilization and easy life of England; and so finds it hard to decide upon a life of "flourishing the dish-cloth, and playing hide and seek with the eternal dustpan." An English friend has told her that it will be "using afive-pound note, to clean a pipe-stem." "The One" is absent, but may come at any time for her answer. Whilst waiting for him, she pays visits to her friends, assists at her Father's second marriage; makes maple sugar with the Indians, and roams at will through the woods until the end of the story. The reader is uncertain whether love or ambition will win, but "The One" falls ill, and seems likely to die, the heroine quickly finds out, that life without him, would be unendurable. The book will appeal to those who feel the "Call of the Wild." The descriptions of the woods at all seasons, and by day and night, are delicately drawn by one who evidently loves nature. The minor characters are quaint, and the "Pippin" amusing. The book, no doubt reflects very accurately the state of mind of a clever, refined girl, called upon to choose between love with poverty on the one hand, and a life of comfort and intellectual success on the other.

John C. Calhoun. By Gaillard Hunt. This is one of the American Crisis Biographies published by George W. Jacobs & Co., Philadelphia, Pa.
In this book the author endeavors

to show not only the chief events in the political career of John C. Cal-houn, but his complete identification with two opposing popular movements, how he helped to form a broad national sentiment, the part he played in the struggle in his State against that sentiment, and his leadership of the triumphant sectional sentiment. He shows that as Calhoun was a popular leader, he was dominated by popular forces, and that his power lay in his correct interpre-tation of the will of his people. To study his public life, therefore, is to study the course of public opinion in the South during a momentous period when it formed into a great movement to resist a greater movement. The book will be read with interest by everyone interested in the struggle which reached its crisis soon after his death, and which has come by dispassionate historians to be treated as the effort of honest men impelled by honest motives.

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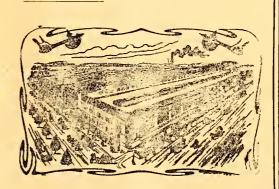
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This is the work which was adopted by the Department of Education for use in public schools in Virginia. This fact alone is sufficient recommendation.

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DETAIL INDEX. Sowing Apple and Pear Seeds....1123 To Remove Warts......1123 Pigs Coughing—Lame Colt. 1123 Restoring Fertility. 1124 Fertilizer for Grass. 1124 Oat Growing—Grass Seeding. 1125 Drainage—Wild Onions......1129 Sheep Husbandry......1130 Analysis of Soil—Fertilizer for Corn—Irish Potatoes—Conserv-

Washing of Land......1132 MULCHING STRAWBERRIES.

ing the Value of Manure— Poultry Manure—To Prevent

The object of mulching strawberries during the winter is to prevent winter-killing caused by the freezing and thawing of the soil during an open winter. It should be applied just before or directly after the ground has frozen, which will usually be the last half of November. The material used should be free from weed seeds and heavy enough to prevent its being moved by strong winds. Coarse marsh hay and straw are among the best materials, while pine needles, leaves of deciduous trees, corn stalks, strawy manure and boughs of evergreen trees may be used with good results. Cover evenly and lightly so that part of the foliage may be seen through the mulch. The finer the material, the thinner it should be applied. Overmulching is as bad as not mulching at all. When light material is used it is advisable to apply brush or similar material to prevent lifting by heavy winds.

Summer mulching retards evaporation, keeps the land free from weeds and provides a clean bed for the berries to rest upon. The winter mulch if not too coarse, may be used for this purpose by raking a portion into the walks, leaving over the row as much as the plants can grow through. Some hand work may later be necessary in helping the plants through if the mulch is heavy or very fine.—Market Growers' Journal.

Buncombe Co., N. C., June 12, '08. I like the Southern Planter the best of any of the farm papers which come to me. S. H. GIBBS.

Chesterfield Co., Va., Sept. 3, '08. I have been a reader of the Southern Planter for a good many years and expect to be a lifetime subscrib-C. C. CLARK.

Caroline Co., Va., June 15, '08. I am very glad indeed that I subscribed to the Southern Planter, as I think it the most practical and useful paper in its line that I ever saw.

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PERFECTLY RESIGNED.

An old Scotchman who was threatened with blindness consulted an ocu-

"Will you have a little stimulant?" inquired the Doctor.

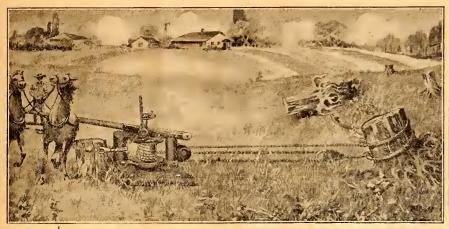
The old Scotchman smacked his lips in eager anticipation.

"Ou, aye, I'll tak' a drink o' any-

thin' you have handy," was the quick rejoinder.

"Ah, that's the trouble!" exclaimed the oculist. "You'll have to stop drinking or you'll lose your eyesight.

The old chap pondered a moment. "A weel, Doctor, it doesn't much matter. I hae seen everythin' that's worth seein', anyway."



SOMETHING NEW IN STUMP PULLERS.

Since Bulletin No. 150, issued by the United States Agricultural Department, claims that machinery cleared land is more tillable than if cleared by explosives, renewed interest has developed in stump pullers.

Three years ago the Hercules Mfg. Co., of Centerville, Iowa, placed on the market the first stump pullers made in solid steel. The weight was reduced 60 per cent. and the pulling capacity increased 400 per cent., thus the principal objection to the heavy

and unwieldly iron machines used formerly was overcome.

The Company has now followed up their first great advancement in stump pulling machinery by designing and building a new triple power puller, illustration shown herewith.

It will be seen that the pulling cable is run over three pulley wheels, thus tripling the power of the rope and machines, working on the same principles as a triple tackle block.

In this way it is said lighter ma chines and lighter cable may be used for heavier work than formerly. Applications for patents are now

pending and the new machines have just been placed on the market by The Hercules Mfg. Co., Dept. 416, Centerville, Iowa.

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A series of articles on Lincoln's life and character—to include hitherto unpublished documents from his own pen and that of one of his secretaries, will be one of the strong features of the Century in 1909. Frederick Trevor Hill has written of "The Lincoln-Douglas Debates," the fiftieth anniversary of which occurs this year; and there will be later papers on "Lincoln as a Boy Knew Him," "Lincoln as a Peace Negotiator," "Lincoln and the Theater," etc.

The autobiography of Augustus Saint-Gaudens which The Century is to publish during 1909 contains a vivid account of life in New York during the Civil War Period, when young Saint-Gardens was an apprentice and an ambitious student of art. Such a picture of city life from the viewpoint of a youth is believed to be unique in our literature.

Ernest Thompson Seton's new story, "Domino Reynard of Goldur Town," the history of a silver fox, which is to be one of the fiction features of The Century in 1909, has for its purpose—in the author's own words—"to show the man-world how the foxworld lives—and above all to advertise and emphasize the beautiful monogamy of the better-class Fox."

Andrew Carnegie has written for The Century an article on the tariff, dealing, among other aspects of the question, with the writer's own relationship to tariffs present and past, especially to the duty on steel.

Mrs. Alice Hegan Rice's new novel, "Mr. Opp," which is to run serially in The Century during 1909, is rich in the humor and pathos which made Mrs. Wiggs such a joy and in the human quality which touches the heart. Plain-spoken neighbors call Mr. Opp a fool, he does talk too much, and his business success is always lurking in some Spanish castle; but the reader forgives all and loves the quaint character for the heroism that gives up cheerily the plans of a life and the woman he loves, to care for and make happy day by day the pathetic little half-sister whose mind is clouded from babyhood.

In "Mr. Opp" Mrs. Rice has created another character that will live.

The Century is to publish a series of interesting interviews, of unusual character, set down by Daniel Gregory Mason—records of familiar talk with notable musicians, among others, Paderewski, Gabrilowitsch, and Kneisel.

The Century has under way, for early publication, papers, from several sources, which will give the public an intimate view of the methods, motives, and character of the late Grover Cleveland. The papers will include an illustrated sketch by Prof. Andrew F. West, on the ex-Presi-

dent's residence at Princeton, and his interesting and influential connection with the affairs of a great university.

ST. NICHOLAS IN 1909.

A jolly feature of St. Nicholas in 1909 will be a series of rhymes and pictures by W. W. Denslow, the illustrator of "The Wizard of Oz," "Father Goose," "The House That Jack Built," etc. "When I Grow up" will be the title of the series, which will portray the "day dreams" of an American youngster. Besides the black and white pages, each number will have two pages of "When I Grow Up" in color.

That prime favorite, Ralph Henry Barbour, has written for serial publication in St. Nicholas in 1909 another story of the Ferry Hill young folks' fun and adventures, "Captain Chub." "Dick," Harry," and "Roy" are all in it; but "Chub" will be the hero.

Bradley Gilman, a classmate of President Accosevelt at Harvard, has written a story of adventure in Egypt called "A Son of the Desert," which will be published serially in St. Nicholas in 1909. A young American lad is a leading character; and the narrative has, among other incidents of stirring interest, an account of a terrific sand-storm, and a capture by brigands who are outwitted



Greatest Capacity. Least Power. 8 to 10 Tons. Green Corn Per Hour.

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by an exposion of dynamite, and a subterranean escape.

Specially for the girl readers of St. Nicholas in 1909 will be a story by Mary Constance Du Bois, "The Lass of the Silver Sword," the scenes laid first in a girls school, and later in a girl's camp in the Adirondacks.

A promising new feature of St. Nicholas the coming year will be a two-page department to be called "The Cosy Cooking Club," conducted by Charlotte Brewster Jordan. The recipes will be given in easy rhyme, with, of course, a brief prose list of ingredients; and will cover simple dainties specially appropriate to the

THE AMERICAN REVIEW OF

' REVIEWS FOR 1909. "The German Empress," frontispiece. "The Progress of the World."
"Record of Current Events," with portraits. "Some American and Foreign Cartoons." Grenfell of Labrador," by P. T. McGrath, with portrait and other illustrations. "New York's First Budget Exhibit," by William H. Allen, with illustrations. "George Gray Barnard: A Virile American Sculptor," by Ernest Knaufft, with illustrations. Alaska's Railroad Development," by Frederick H. Chase, with illustrations. "Th Coal Revelopment," by Freuerick ... with illustrations. "Th Coal Re-sources of Alaska," by Guy Elliott with illustrations. "High-

Pressure Fire Protection," by Herbert T. Wade, with illustrations. "A National Corn Exposition," by Will A. Campbell, with portraits and other illustrations. "The National Movement for American Music, by Arthur Farwell. "Loans on Salaries and Wages," by Samuel McCune Lindsay. "Quebec, Britain's French Empire in America," by Louis E. Van Norman, illustrated with maps. "Leading Art-icles of the Month," with portraits and other illustrations. "Leading Financial Articles. "Some Books of the Holiday Season," with illustrations. "The Season's Books for Children," with illustrations.

THE CHRISTMAS LIPPINCOTT'S. With the approach of Christmas, everybody ought to be in a joyous n ood, even if everybody isn't, so let us away with gloom and melancholy, and have about us only reading matter that is cheerful in tone and atune with the holiday season. The December Lippincott's provides just the sort of entertainment to put you in good humor. The complete novel is a humorous mystery story entitled "Seven Days," by Mary Robert Rinehart, v hose book "The Circular Staircase" now ranks as one of the season's best sellers. Mrs. Rinehart has chosen for the theme of her latest story the mishaps and adventures of a number of society folk-and a few others-who

suddenly find themselves quarantined, owing to the illness of a servant, in a house where the society folk have gone to dine. Some of the complications are due to the presence of a young couple who have been divorced but are still in love with each other; the ex-husband's spinster aunt, who has a horror of divorce, and is unaware of the rift in their matrimonial lute; a girl who rashly undertakes to impersonate the wife, to spare the aunt's feelings—this before the ex-wife appears on the scene; and a young man who is unaware of the deception and falls in love with the supposed wife. All sorts of weird happenings take place in this "house of too much trouble" during their imprisonment. A diamond bracelet, a pearl necklace, and other valuables mysteriously disappear, the telephone wires are cut, and one of the women guests is brutally embraced and kissed by a person unknown. Alto-gether, there are enough amusing situations for a dozen stories.

Among the notable offerings other than fiction are a witty and amusing paper on "Irish Courtship," by the famous Irish humorist, "Seumas Mc-Manus; "The Nativity," a beautiful miracle play in blank verse, by Chas. L. O'Donnell, a delightful sketch called "The 'Truly' Christmas," by Edward L. Sabin; a very funny discourse on "Anatomy for Beginners,"

Don't Shiver

Just scratch a match—light the Perfection Oil Heater—and stop shivering. Wherever you have a room that's hard to heat—that the furnace doesn't reach—there you'll need a

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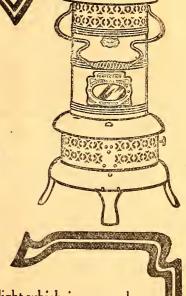
Just the thing for blizzard time or between seasons. Its genial Every heater warranted.

glowing heat makes any room cheerful and cozy. No smoke -no smell-smokeless device prevents. Brass font holds 4 quarts of oil burning 9 hours. Finished in japan and nickel.

The Rayo Lamp gives a restful, steady, soft light which is so much appreciated by workers and students. Made of brass, nickel plated, with the latest improved central draft burner. Every lamp warranted. Write our nearest agency for descriptive circular if your dealer cannot supply the Perfection Oil Heater or Rayo Lamp.

STANDARD OIL COMPANY
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by Thomas L. Masson; a strikingly beautiful Christmas poem, "Jesus unto Mary," by Chester Firkins, and other contributions.

THE PROPER MANAGEMENT OF HAMS.

Mary Washington.

It is a generally conceded fact that Virginia produces the finest hams in the world, as superior to the gross, swill-fed porkers of Cincinnati and Chicago as the nectar of the gods is to common beer. The delicate flavor so highly esteemed by epicures is largely due to letting the hogs feed on clover and mast until six weeks before they are killed, when they should be put up and fed on corn. Great size and fat are to be carefully avoided. You will get the most delicately flavored hams from a hog weighing not more than 150 pounds, and not over a year old. If you have buttermilk to spare, you will find it pays you well to give it to your hogs. It produces a delicate fat and a finer flavor.

The hogs should be cut out the next day after killing, and the hams and shoulders rubbed with a teaspoonful each of saltpetre and powdered borax. The first gives the meat a pretty red color, and the second acts as a preservative against insects. Next the hams and shoulders should be rubbed thoroughly and plentifully with salt, and lastly with a mixture of molasses, brown sugar and black pepper. A touch of Cayenne pepper also will not be amiss, both kinds of pepper being ground. Then pack them away, and let them remain undisturbed for a month or six weeks. In moderate weather a month will suffice for the salt and seasoning to strike in, but in very cold weather six weeks will be better. Put them in a dry place, else they are apt to mould, especially if there should be much rain. When you unpack the hams and shoulders, lay them out singly for a few days, so they may dry off before you bag them. If the seasoning does not seem to have taken well, rub on a little more. I also think it is a good plan to rub on another teaspoonful of borax before bagging them. I have found this the best device I have ever tried for keeping off insects. Make bags of coarse, unbleached cotton and bag your hams, tie them up securely and hang them before the cold of winter relaxes and the insects begin to stir, and lay their eggs. In a mild winter, they will begin to do this by the middle of February. You will make

your hams still more secure if you will wrap a large newspaper, or sheet of wrapping paper around them be-fore putting them in the bags. It is not desirable to have your smokehouse light and sunny, but better to have it cool and dark. From my own experience, I should say that smoking is unnecessary. It may possibly add to the keeping of a ham, but not to its flavor. An unsmoked ham has, to my taste and that of many others, a finer flavor than a smoked one. made this discovery by pure accident. In my early housekeeping days it was not convenient for me to have a smoke-house, and during this time my hams had such a peculiarly delicious flavor that when I, at length, got a smoke-house, I simply used it to hang the meat in, and never smoked it.

The mode of cooking a ham has a good deal to do with its excellence. It should be put on in a boiler of cold water, cooked slowly and left in the boiler till the next day. In this way it will reabsorb some of the juices given out in the boiling process. It should then be skinned, and stale bread (preferably beaten biscuit) grated over it. Then it should be set in the stove a few minutes

1908

1908

In the Stud

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THE GENERAL 2nd. IMPORTED HACKNEY STALLION.

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Fee for the fall season of 1908, \$15; inch are \$100 diverse time of service.

single leap \$10, due at time of service. Address

T. O. Sandy, Dr. John Young or Dr. J. G. Ferneyhough, Owners. BURKEVILLE, VA.

N. B. We are offering for sale at attractive prices, two young hackney stallions, one and two years old, both registered and splendid individuals.

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We want every man and woman in the United States to know what we are doing-we are curing Cancers. Tumors and Chronic Sores without the use of the knife or by X-Ray, and are endorsed by the Senate and Legislature of Virginia. We Guarantee Our Cures.

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Chestnut horse by "Squire Rickel," son of the famous Cadet; dam, "Marlorie," a gold medal winner by "Roseberry."

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WEALTH, 29579. Record 2:10

Bay horse, 16 hands; weight 1,100 pounds, by Gambetta Wilkes, world's leading sire of standard performers, with over 20% in the list; dam Magnolia, by Norfolk, 3670, sire of Miss Nelson, 2:11½, etc. Wealth combines fine size and good looks, with great natural speed.

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Stallion cards, folders and catalogs compiled; pedigrees of trotters and thoroughbred horses traced. My library includes Year Books, Trotting Registers, Stud Books, Files of turf journals and other references. Special attention to registration of horses.

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Hunters, jumpers, high class harness horses and Shetland Ponies for sale. The Woodlawn herd of Shetlands is headed by the prize winning stallion, Governor Glenn, fee \$15 season. I am offering some choice Shetiand brood mares at reasonable prices.

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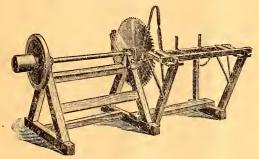
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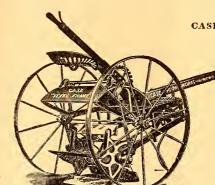
Implements that work easy and wear well are the kind we sell.

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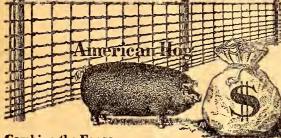
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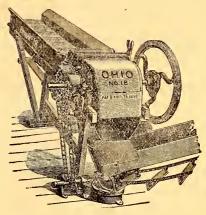


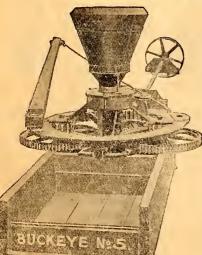
Combine the Fence and the Hog and get the Dollars

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OHIO .FEED .AND
ENSILAGE CUTTERS.

For hand or power
Furnished with or
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Buckeye Feed Mills and Powers, for grinding ear corn or small grain. The best mill for Dairymen.

It leads all others in fast grinding, in lightness of draft, in strength, in durability and especially in being the best 2-Horse Power for operating Feed Cutters, Corn Shellers, Wood Saws, or any other light running machinery.

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Heavy gauge painted V-Crimp and also best grades of rubber roofing in stock at lowest prices.

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for this coating to brown. then be

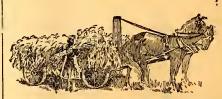
"A dainty dish to set before a king." If you have some delicate middling and will rub on it the same preparation you put on the hams, and bag it similarly (dividing larger pieces of middling into two) you will have home-cured meat just as nice as the breakfast bacon you buy at a high

price from your grocer.

In connection with the subject of hams, I will say a few words about the jelly stock prepared from the hog's feet. This makes far nicer jelly than gelatine, though, on the other hand, it is much more troublesome. The feet should be dropped into a tub of cold water, and stand there several days, if the weather is cold enough, otherwise the time will have to be shortened. Each day the water should be changed, and the feet well scraped with a sharp knife. They should be nice and white by the third day, and they should then be boiled in a large ham boiler (without salt, of course,) the feet taken out when tender, and the juices strained and poured into a large bowl, or bowls. used to feel compelled to make up this stock in a hurry for fear of its tainting till I hit upon a simple experiment which enabled me to keep it more than twice as long. A deposit of oil (commonly known as neat's foot oil, I believe,) rises to the surface of the jelly stock, forming a thick coating when it is thoroughly cold. Instead of skimming off this at once, I adopted the plan of leaving it till just as I was ready to make the jelly, and as it made the stock impervious to the air, I kept it perfectly sound for many days, especially when kept in a cold place. When skimmed off this oil, which is very delicate, is nice to rub on harness, melted before applying it. Home-made jelly stock makes delightful charlotte russe, as well as jelly, if it is nice and light colored. A pint of it will answer for a quart of cream. Use the whites of six eggs stiffly frothed. Dissolve the jelly stock in a tea cup of fresh milk, boiling hot, and when it becomes lukewarm, drop it slowly into the cream (stiffly frothed) and the eggs, to which add a teacup of sugar and teaspoonful of yanilla. Then pour into a bowl, or bowls, and set in a cold place. For a family of five or six persons, you may halve the above proportions, as both the cream and whites of eggs double their bulk when beaten. It seems strange that any part of so gross an animal as the hog can enter into the composition of such a delicious and fairy-like dessert; also it seems strange that this animal should furnish part of the material for such a terrific explosition as nitro-glycer-

ine. Truly, the hog is a versatile genius.

I recently came across a brilliant 'bon-mot" in connection with the hog. Sir Moses Montifiore, the eminent Jewish philanthropist, happened to be in company with an ill-bred man who was running down Jews. The latter suddenly checked himself, exclaiming "But I must stop. Sir Moses looks as if he could eat me up." "Oh, no," exclaimed Sir Moses. "The tenets of my religion forbid it."



The above illustration shows Miss Phillis Hunt, of Iowa, engaged in loading corn fodder on an Electric Handy Wagon made by The Electric

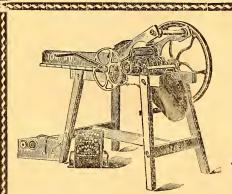
Electric Handy Wagon made by The Electric Wheel Co., Quincy, Ill.

This young lady, according to reports, likes nothing better than loading and hauling corn fodder on these low wagons. She is about 16 years old and weighs 110 pounds and thinks she is able to haul as much corn fodder on a Handy Wagon in one day, as a full grown man can haul on the ordinary high wagon in the same length of time.

Miss Hunt, however, according to her letter, is not willing to undertake to haul all the corn fodder and it would be useless for any of our young

and it would be useless for any of our young farmer readers to imagine that they could avoid all this work, by contracting a matrimonial alliance

with Miss Hunt.



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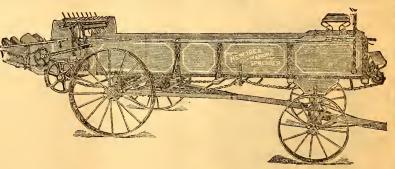
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Built like a wagon-Axles same length. Tires 4 inches wide-Best on earth. Write for special offer on first machine sold in each county of our territory.



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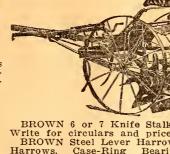
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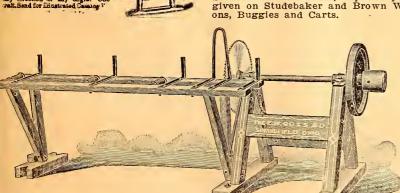
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BROWN Steel Lever Harrows, Wood
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sizes, plain or with levers. Acme Harrows of all styles kept in stock at lowest net prices.

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The above illustration is that of the Ross Wood Frame Pole Saw for sawing all kinds of timber, both long and short. The construction of same is the very best. The lumber used is hard wood and good size, not frail in any particular. The bearings are all babbitted. The arbor is extra large, size 17-16 inches, and has heavy fly wheel. Frame is not nailed together, but mortised and tennoned and bolted. They are as good as the best and better than the majority of others. The table is equipped with rollers, making it sonvenient to handle heavy timber. Write for special catalogues and prices.



Studebaker Farm Trucks-with wood steel wheels and removable bolster kes. Write for prices and cataogues.





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This is the latest addition to the line of Scientific Feed Grinding Mills, and has been designed to meet the requirements of those having horse powers and

With a two-horse sweep power or with a two-norse sweep hower or with a two- or three-horse engine the mill will grind shelled corn, outs, rye, barley, wheat and all small grains at the rate of 10 to 20 bushels per hour, also grinds corn and cob.



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Scientific Combined Mill and Horse Power No. 8. Double action, tripie geared, new. Grinds car corn and all corn and an smail grains fast, fine and easily. Grinding plates revolve in oppo-site directions,

The Triangular Frame is oak heavily bolted. Two sweeps are furnished and two baskets are included. The feed is alternately discharged into either basket by cut-off. The mill can thus be fed and feed taken away with out stopping the team. No trough or conveyor to choke, freeze up or clog.

Both quantity of feed ground and quality of work done are regulated in a moment, without stopping team, by convenient hand screws easy to operate, or plates opened so they can be run empty. By loosening two thumb screws (unper case and bepress opened) screws (upper case and hopper opening on hinge), plates can be changed in a moment. No tedious bolts and nuts to worry.

> Scientific No. 8 used as a power, including 15-foot tumbling rod, two rod rests, and pulley, either 18 by 4 inches, 20 by four inches, or 24 by 4 inches. Tumbling rod makes 58 revolutions per minute. Fast enough for running feed cutters, shellers, wood saws,

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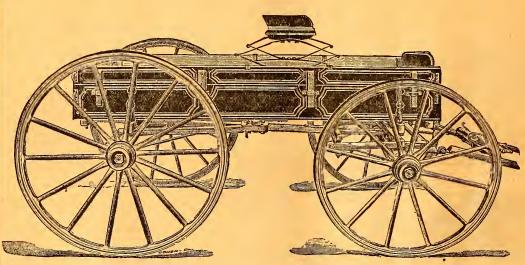
It does not make any difference where you live, we will ship you one of our Spotless Farm Wagons and let you examine it and try it before paying a cent on it. If not satisfactory return it at our expense. All we ask you to do is to deposit with your bank the cost of the wagon and have them write us that you have done so. If the wagon is satisfactory, they are to pay us the money. If not, they are to give it back to you. Is this fair enough?

fair enough?

These wagons have been on the market for twenty years and have an established reputation. Previously they have been sold under a differnt name. Each wagon carries a guarantee for one year as shown below.

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\$27.75

Complete Wagon as Shown

THIMBLE SKEIN ONE HORSE SPOTLESS WAGON.

With Double Box, Spring Seat and Shafts.

	Size of .		Height of Wheels.		Dimensions of Beds			lty	Prices	
Skein (Or Axle).	Size of Tire	Front	Hind	Lower	Тор	Length	Capaci	Complete Wagon with body and seat	Running Gear only	
2B1790 2B1792	2½ x 6½ 2½ x 7½	1½ x ¼ 1¼ x 5-16	3 ft. 2 in. 3 ft. 2 in.	$\frac{31/4}{31/4} \times 8 \text{ in}$ $\frac{31/4}{31/4} \times 8 \text{ in}$.	9¾ in. 9¾ in,	4 ¼ in. 4¾ in.	7 tt. 6 in. 7 ft. 6 in.	1500 1800	\$27.75 28.75	\$23.40 24.38

THIMBLE SKEIN TWO HORSE WAGON COMPLETE

2B1793 2½ x 8 1½ x % 3 f	t. 4 in. 4 ft. 11½ in.	6 in. 9 fc 6 in. 20	00 \$44.40 \$37.80
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ONE HORSE STEEL AXLE WAGON

With Double Box, Spring Seat and Shafts.

2B1798 1½ > 7 2B1800 1½ x 7	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$. 3½ x 8 in. 9¾ in. 3 ft. x 8 in. 9¾ in.	4¾ in. 7 ft. 6 in. 4¾ in. 7 ft. 6 in.	1500 \$27 75 1800 28 80	\$23.40 \$24.60
	STEEL AX	KLE TWO HORSE	WAGONS COMPLET	E.	
281802 13% x 8 281804 13% x 8½ 281806 15% x 9	1½ x 3/8 3 ft. 4 in 1½ x 7-16 3 ft. 4 in 1½ x ½ 3 ft. 4 in	4 ft. 11½ in. 4 ft. 11½ in. 4 ft. 11½ in. 11½ in.	6 in. 9 ft. 6 in. 7½ in. 9 ft. 6 in. 8½ in. 9 ft. 6 in.	2000 \$46 80 2500 48 00 2700 49.20	\$40.20 • 41.40 • 42.60

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Shafts, for one horse wagon, complete	each each

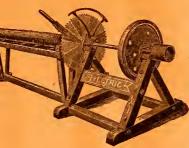
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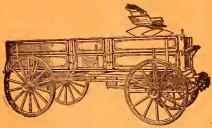
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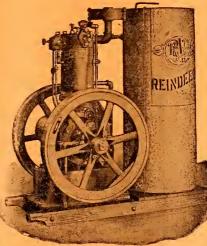


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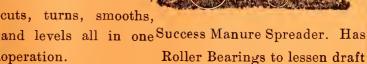


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