#### THE

# Southern Planter

DEVOTED TO

### AGRICULTURE, HORTICULTURÉ, LIVE STOCK AND THE HOUSEHOLD.

T. W. ORMOND,	-	-		-		Propriètor.
W. C. KNIGHT,	-	-	-	-	-	Editor.
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44th Year.

MAY, 1883.

No. 5.

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## SOUTHERN PLANTER.

DEVOTED TO

Agriculture, Horticulture, Live Stock and the Household.

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

T. W. ORMOND, PROPRIETOR. W. C. KNIGHT, EDITOR.

44TH YEAR.

RICHMOND, MAY, 1883.

No. 5.

## FARMERS AND FARMING IN VIRGINIA IN THE OLDEN TIME.

### No. 10.

[There is much in the communication of our old friend, which induces us to adopt it as one of our articles in the series of olden time farming, and we, therefore, give it place in this connection .- ED. S. P.]

Mr. Editor,—As we grow older, there is an increased disposition to look back and recall incidents that loom up distinctly before the mind's eye. There is now a melancholly interest in recalling such bits of history, yet they serve as mile-stones, so to speak, and measure our progress. For the octogenarian farmer, with vigorous mind and memory, to go back to childhood, and note, step by step, the progress his calling has made from the wooden mould-board plow to the Oliver chilled or buggy plow, it looks like romance. Or to recall the wooden flail, or the tramping out the grain, to the modern threshing machine, or to think of the reaper with his sickle, or the mower with the old Dutch scythe that had to be sharpened by the hammer, on a small anvil of one and a-half inches on its face, the lower end sharp, and driven into a log, and contrast the progress with the header-machine of the Pacific States, that cuts, threshes and

drop the bags as it marches around a hundred-acre field, it is hard, very hard, for him to realize it when he attempts to connect the two modes. Yet, when he remembers to have listened with wrapt attention to his grand-sire, who built his cabin at the head spring of one of the rivulets that make the north branch of Rockfish, tell how he, with a half dozen of his neighbors, set out, each with his hogshead of tobacco, to roll it to your city, one hundred and twenty-five miles, he thinks the world moves. This was near about the date that Governor Spotswood carried his bold young men, the "Knights of the Golden Horse Shoe," as Caruthers, of Rockbridge, immortalized them, to the top of the Blue Ridge in Swift Run Gap. Just recall, if you can, the scene of five or six of the hard-fisted yeomanry of what was at that date Goochland county, from under the shadow of Hump Back, collecting at some agreedupon opening in the forest, each with the concentrated toil of twelve months, in his hogshead of tobacco, his only faithful horse between the shafts, attached by pins to each end, and the fellows fitted around each end, on which it would roll; his own and his horse's provision for a ten- or twelve-days' tramp, secured on a pack-saddle on the horse's back, when all, taking leave of wives and children, assembled to see them set off.

I repeat, Mr. Editor, recall a scene of this kind; commence at that day, and contrast it now with a train of cars—the telegraph and telephone, and say that this is not, in very truth, the

age of progress!

Pardon the length of my introduction.

I sojourned recently, for some days, in the vicinity of Greenwood and Afton, on the Chesapeake and Ohio Railroad. ing more of the farm, known for a number of years as Brooksville, we propose to recall some incidents in its history which, we hope, may prove interesting. Some time in the last half of the last century, there was a prominent lawyer, "James Brooks," who resided a mile and a half southwest of Afton station, and in what was then Albemarle, now Nelson. He had two sons-Robert and James. One of them, Robert, we think, married a Hayes, then a numerous and influential family, now nearly extinct. It founded what was a prominent and conspicuous village, called "York," a little northwest of the Brooksville buildings, celebrated for a quarter of a century for horse-racing, cock fighting, drinking and dissipation in all its forms. There were two or three stores, a tavern and quite a number of residences. The remains of several foundations, and the deeply indented

road, now mark the site. Mr. Brooks opened a hotel. The stage from Richmond to Staunton stopped. The Staunton and Scottsville turnpike, built about fifty years ago, at that point, diverged to the southeast from the Staunton, Charlottesville and Three Chopped or Three Knotched road to Richmond, which took this name at Boyd's Old Tavern, four miles east of Charlottesville. Then the trade to Scottsville, and the stage line from Charlottesville West, meeting at this point, made it conspicuous and far-famed. Tyler, perhaps, succeeded Brooks, then Beers, we think, then Farron; that brings us to the war. Farron was an extraordinary man in any respect, but as a farmer conspicuous. He was a native, as we believe, of Fauquier. The Chesapeake and Ohio Railroad, in its construction—first the temporary track, of which that distinguished engineer, the late Col. Charles Ellett was the projector, and located it, assisted by Col. Whitcomb, a young man, who here made his debut-made Brooksville their headquarters. Col. Ellett and his staff were there some time. The cars over the temporary track started about, 1852, and in 1858 were followed by the railroad—Col. Crozet located-including all three of the tunnels. He was a fixture at Brooksville a good while. Young — Howard, of Richmond, was one of his assistants.

We think it was in 1853, that the first threshing machine, 8-horse, was hauled across Rockfish Gap by some enterprising Valley man. He proceeded with it down the Scottsville pike, into the North Garden neighborhood, expecting the Coles, the Duretts, Moore, Hart, &c., to patronize him. He found the Coles threshing their crop with the old-fashioned 4-horse machine. The others were not ready, and gave him the cold shoulder. Disgusted, he headed his horses towards the Valley, intending in his chagrin, to wipe the dust of Tuckahoe from his feet. As he was passing Brooksville, Mr. Farron encountered him, and heard his anathemas against North Garden. He had his Crawford field, nearest the railroad, and one directly south, 125 acres, perhaps, in both, in wheat, and the large field between the Charlottesville and Scottsville road in rye and oats. He was a prompt man to decide. Said he to the Valley men (two of them, the driver and feeder), "I will give you one hundred dollars cash to thresh my wheat, rye and oats." Agreed, said they, on one condition, that you are to keep the machine going and lose no time. I will do it, said Farron. He saw two of his neighbors—Wallace and Timberlake, I believe, and told them he wanted their three-yoke each of oxen and wagon at daylight next morning. The threshing began, and it was enjoined on those in charge of the wagons, that they must not approach the machine with less than twenty bushels of wheat to the load. There was but one load short—his own team; that came in with fifteen bushels. Farron saw it; taking Jim to a clump of bushes hard by, he administered a gentle reminder. It was enough. His twenty-five or thirty slaves respected and, I may say, were devoted to him. The Valley men, on going to their meals, found the household arrangements just as perfect—all like clock-work, and they finished up promptly, and to Mr. Farron's entire satisfaction, a crop of 2,800 bushels of wheat; oats and rye not remembered—the first threshed by an 8-horse machine, I doubt

not, in Albemarle county.

I might spin out an interminably long letter of incidents in connection with the building of the railroad, boring the tunnels and of the war, but would weary you. At the time of Sheridan's raid, who came through Rockfish Gap, whilst Mr. Farron heard of their coming, was busy preparing for them, yet the advance guard came down upon him before he was aware. Riding through the farm a few days ago with the proprietor, he showed me where they came up to Mr. Farron, when springing on a fine riding horse he was accustomed to ride, he dashed off through a gate-way into the heart of his farm, up a steep hill, and although they fired at and chased him some distance, he eluded them unharmed. For years after the war, the farm was wretchedly managed; much of it butchered, as we say, plowed up and down hill, washed, naked and covered with filth. The present proprietor, with the heavy No. 7 Livingston 3-horse plow, is restoring and stocking it heavily at the same time. On one of the highest hills he pointed out the locality where Mr. Farron reaped the elegant Blue Stem wheat, out of which the Richmond mills took the premium, before the war, at one of the World's Fairs—Paris, perhaps, He is in a fair way to put out a crop of a hundred acres of corn that, with a favorable season, ought to bring a big crop.

J. MARSHALL McCue.

PERHAPS I do not know what I was made for; but one thing I certainly never was made for, and that is to put principles on and off at the dictation of a party, as a lackey changes his livery at his master's command.—Horace Mann.

#### ADDRESS OF COL. S. S. BRADFORD.

[Col. Bradford was a delegate from the Virginia State Agricultural Society to the Convention which was called by Agricultural Commissioner Loring to assemble in Washington in January last. We cheerfully give space for the publication of his address delivered to that Convention. We are sure it will be read with interest, as Col. Bradford is so well known as the leading breeder of short-wool sheep and an amateur of improved breeds of cattle.—Ed. S. P.]

Mr. President,—I came in a few moments ago with not the remotest intention of engaging in discussion. Until the day before the Convention met I did not expect to be able to attend it. I had for several weeks suffered with severe cold, and my head felt like an iceberg, and was as destitute of thought. I could, I believe, have as easily called up spirits from the vasty deep, as have drawn thence one iota of thought upon any subject. I came here, sir, not to speak, but to listen; not to teach, but to learn, and I am pleased to say that I have not come in vain. The essays that have been read, and the discussions they have called forth, have delighted and edified me. I have learned some important truths. Some of my previous opinions and practices are more confirmed, and some I am made to doubt, and they demand of me further study, investigation and experiment.

Our final adjournment, Mr. I'resident, draweth near; the time is short, and I shall consume but little of it. It is my misfortune not to have heard the whole of the essay just read by Dr. Ellzey, and to have heard very imperfectly the subsequent remarks by him and Col. Beverly. I cannot take opposite ground to those very judicious and practical gentlemen without some measure of distrust of the strength and tenableness of my position. But my reason, experience, observation and what I learn from reading and from conversation with successful husbandmen are all adverse to the proposition that "shelter is not economical or essential in the Middle and Southern States for cattle and sheep," and that "the Shorthorn is, for all purposes, the best breed of cattle for the farmer." If I have not mistaken the teachings of a not very limited experience, a barn for the combined purposes of sheltering stock and storing forage, will, if judiciously managed, afford advantages fully equivalent to 25 per cent. interest on its cost.

In cold, dry climates, warm shelter is economical chiefly in the conservation of the vital heat of the animal. If the animal is exposed to cold, the waste of carbon (animal heat) is much greater, and a larger proportion of the food eaten daily is burnt up in the production and preservation of that heat than if in a condition of comfort and warmth, and in most sections of the country boards are cheaper than forage.

All kinds of live stock suffer more and lose more of flesh and growth by exposure to cold rains than to a dry atmosphere of lower temperature; consequently, in the Middle States, where the winters are moderate but wet, good, clean, drv, well-ventilated shelters are more essential to health and thrift than in the colder but dryer climates. Protection against winter storms is beneficial to all classes of stock.. but especially so to sheep. Their fleeces, saturated with rain in winter, do not dry off under several days, and rain-falls at intervals of a few days keep them under the burden of a wet and heavy fleece nearly all winter, with effect upon their health and constitution not unlike that of wet clothes long worn by a human being. Open shelters are less beneficial (and to sheep, probably of no benefit) than closed ones, for the reason that when the wind confronts them they afford no protection. and the stock passing in and out of them at will during rain-fall, carry into them a great deal of water, and renders it impracticable to keep them dry and clean—especially does this objection hold with sheep, and it were, doubtless, better that they bear the winter's storm than occupy filthy, damp, unventilated or crowded shelters—the most fruitful, perhaps, of all sources of disease; it is even more important that their sleeping floors and their feet be kept dry than their bodies. Dryness is a condition most favorable to their thrift, to the growth and health of the fleece, the length, strength, uniformity of diameter and felting property of the fibre, and to its making a good, strong, and durable fabric. In summer, when the wool is very short and quickly dried off by wind and sun, exposure to rain is less hurtful, but they should be carefully sheltered against the cold fall, winter and spring rains. A neglected sheep is an unprofitable animal. All good stock are profitable in proportion to the judicious care and attention they receive. In successful sheep husbandry intelligent care is the first requisite; and the best season to care for them is from New-year to New-year. I am not prepared to advocate low, single-story structures, unless made of poles and straw or other inexpensive materials, for I question the economy of a single-story building for any The roof is the most expensive item in building, and the more room and accommodation secured under a roof of given dimensions, the more economical is the building as a whole. In providing shelter for stock, I would have building 18 or 20 feet high; the ground floor, or first story, 8 feet pitch for stock, and the upper apartment for storing the supply of forage. This combination affords many conveniences and economies. Hay may be housed after one-fourth the exposure to sun and air that is necessary to safely stack it out, and if to avoid an approaching rain or heavy dew it is carried in little too soon, the curing process will go on quite as well in the barn. Hay that is little wilted by the sun and cured in the shade is more valuable than if longer exposed to sun and air. In drying, hay loses in nutriment and in the property of assimilation by the animal. Green grass is the natural and best food for animals, and the more nearly we can preserve it in that state, the more palatable and nutritious and healthful it is. Two thirds of the hay of the country is not grass cured or preserved, but grass bleached or killed. Stacked in open air it requires a longer drying or killing process than if housed, and however skilfully stacked, it becomes dry, hard and woody, and the whole surface depth of 6 to 12 inches blackened, half-rotted and worthless, and if not separated from the better portion, the stock involuntarily eat some of it to their serious detriment. To sheep especially, nothing is more fatal than damaged, As soon as the hay crop is harvested in the barn, with opening in top to pass off any heated air, the windows should be closed. and the air as effectually excluded as possible. When the feeding season arrives the forage is all at hand; no second handling or hauling, and the whole is as fresh, bright, fragrant, palatable and nutritious as when stored there, to be conveniently placed in the racks below, where the stock receive it with avidity, and with no loss compared with the wasteful method of feeding it in the field in all conditions of the land and weather. By frequent littering of the floor with straw, leaves or other material suitable for the cleanliness, comfort and health of the stock, with occasional dusting with plaster and ground phosphate, the chemical constituents of the excrements of the animal (that would be largely wasted on the cold field) are all preserved, and a large quantity of the most valuable manure secured, which by the coming fall will be well decomposed and dry for convenient and uniform application to the soil, preparatory to wheat seeding, and, to that extent at least, the farm be spared the prodigal outlay for commercial nitrogen, at the rate of \$500 to \$600 a ton, for which he is rarely if ever reimbursed. manure heap is the farmer's savings bank, into which, if he makes proper deposits, his drafts will never be dishonored. Is it a vain conception, Mr. President, that a building combining these advantages will, properly used, afford an annual interest of 25 per centum on its cost? It is mainly in reference to farms of 500 to 1,000 acres, or less, that these reckonings are made. I have in contemplation the average and smaller farms, the agricultural masses, the "vulgar herd of farmers," as they are sometimes satirically named, of which class I am an humble type. On large bodies of land, with "cattle on a thousand

hills," without a corresponding hay crop to house, the winter forage consisting of straw and corn not stripped from the stalk, it would be more convenient, certainly, and probably more economical, to carry it to an adjoining field for cattle, followed by an adequate number of hogs, to gather up the waste and offal; and my friend, Col. Beverly, is wise, I've no doubt, in pursuing that policy, as he is in all his business methods. "The lines have fallen unto him in pleasant places; he has a goodly heritage." His thirteen hundred cattle feed upon broad fields of blue grass, so densely sodded that the hoof of a bullock of a thousand pounds, after a week's rain, makes no more impression upon it than does the delicately slippered foot of his accomplished daughter on his Turkey carpets.

The remarks of my friend, Dr. Ellzey, on Merino sheep-husbandry I did not distinctly hear. I should be sorry, Mr. President, to appear egotistical or to assert my opinions and practices dogmatically, and if in illustration of a principle I refer to myself or my methods, I hope it will be charitably construed. I have had thirty years' conduct of sheephusbandry, and chiefly Merino. Well-bred American Merino sheep, of Spanish extraction, yield from 50 to 100 per centum more wool to their live weight and to the food consumed than the coarse wool varieties do, and until late years its market value per pound was about 33½ per cent. higher. Merino wethers, two to five years old, and ewes (after breeding) six to eight, fatten readily, and their mutton is unsurpassed. This fact is not generally known, however, and they are not fashionable or popular with the butcher. They do not tallow excessively; their flesh marbles, and the butcher does not find in the fat Merino, as he does in a fat Cotswold, surplus tallow to coat over a poor carcass and make it saleable. With wool as a primary and mutton a secondary object, well-bred Merinos could then compete for profit under any circumstances, with any other breed. But of late years improved machinery has given greater utility to the coarse fibre, and fine wool is worth no more than the coarse, and not as much as the middle The Merino is of greater longevity, but of slower growth and later maturity than the larger breeds. Their lambs cannot easily be made large and fat enough for the early spring market—the only season when lambs sell at very good prices-and for these reasons, with conditions favorable to making good mutton and early lambs of the larger breeds, the Merino is less profitable. But there are thousands of acres so rough and of herbage so meagre, as to be incapable of making profitable mutton or lambs of the larger breeds, where the more active and hardier Merino would thrive and yield a good fleece, and, with addition of little grain, good mutton, and afford a respectable revenue from land that otherwise cannot be made immediately profitable, and would gradually improve its fertility and herbage, and ultimately fit it for more profitable methods of culture. The best sheep I have handled for combination of wool and mutton, at present, is a cross of Merino and one of the larger breeds. It yields a heavier and more valuable fleece; is hardier, and fattens more easily; of better flavor and quality of flesh, and, at same age, weighs nearly as much as its larger progenitor.

Mr. President, with the statement that the Shorthorn, where good pasture and forage abound, is the best general-purpose race of cattle, and for beef as a specialty, if it has an equal has certainly no superior, I am in perfect accord; but I cannot accept the opinion that it is, under all circumstances, or for all purposes, the best breed for the farmer. moderate pasturage and forage the Devon is his superior for general purposes, and can be made profitable when the Shorthorn cannot be maintained. For milk, butter, and the yoke, as specialties, the Shorthorn is not so desirable as the Ayreshire, Jersey, and Devon respectively. I am a breeder of Shorthorns, Mr. President, my herd is a principal source of my living. I can have no wish to do them injustice or disparagement. I have them for sale, and for six years have not had a bull calf to remain on my hands twelve months. Formerly I was a breeder of Devons and Merinos. They were then best adapted to the character and condition of my farm; but now, with not two, but twenty blades of grass where one then grew, I find Shorthorn cattle and the mutton breeds of sheep more profitable. I still have a fine flock of thoroughbred Merinos. My profit from them is in furnishing rams and ewes for the improvement of other flocks. Why, you may ask, were Devons and Merinos formerly, but Shorthorns and Cotswold now, more profitable to me? The reasons will manifest themselves in a few illustrations. The theory is generally, if not universally, accepted among intelligent livestock men, that animals consume food in proportion to their live weight, and that 3 per cent. of their live weight of food, of the nutritious value of good timothy hay, is required daily to replace the daily waste through their pores, lungs, and other natural passages. The average weight of the Shorthorn is about 50 per cent. greater than that of the Devon and other small breeds of cattle of same age. We will estimate the Shorthorn, three years old, at 1,500 pounds; the Devon, same age, at 1,000 pounds. To supply his daily waste the Shorthorn will need daily 45 pounds of food equivalent to hay; the Devon 30 pounds. With these quantities respectively they will main-

tain their status quo-neither increase or decrease. Place them in a field of such herbage that 30 pounds of hay equivalent is all that each can gather in a day. The Devon would remain as he is; the Shorthorn would daily decline. Where they could each receive 45 pounds daily, the Shorthorn would be stationary—the Devon daily increase. Transfer them to a rich, luxuriant pasture, where they could readily gather all they are capable of appropriating, and the Shorthorn, with 50 per cent. greater capacity for gathering, digesting and assimilating food, will in that proportion each day consume more food and add more to his frame and weight than the Devon. Rear them alike from calf-hood, and the Shorthorn, of quicker growth and earlier maturity, with greater capacity for assimilating food, will consume yearly 50 per cent. more food and increase 50 per cent. faster, and, at two years' old, be about as heavy as the Devon at three. The Devon, in the third year of his growth, will probably consume as much food as he did in the two previous years, and his 1,000 pounds produced in three years will have cost considerably more than the Shorthorn's 1,000 pounds produced in two. The same relative proportions obtain in respect to small and large breeds of sheep. Hence the Devon and Merino are more profitable in meagre or moderate conditions of supply—the Shorthorn and Cotswold where they are rich and abundant. For special purposes, the Devon, with sufficient weight—and sufficient weight can be given him by proper care from calf-hood to maturity—has no equal for the yoke. As a typical butter race the Jersey has acknowledged preëminence above all breeds, but it is profitable, perhaps, for nothing else under the sun. For milk, without regard to quality, the Ayreshire claims supremacy. An Ayreshire cow of 800 pounds and a Shorthorn of 1,200 pounds (about their relative weights), yielding each daily six gallons of milk of like quality, the Ayreshire consuming one-third less of same food daily than the Shorthorn, her six gallons would cost one third less than the Shorthorn's six gallons, and for that special purpose she is in that proportion more economical. But when the milking period is over, and they are turned into rich pastures or to other nutritious food for beef, the Shorthorn asserts her superiority. She will consume daily one-third more food, and daily make one-third more flesh than the Ayreshire—is capable of converting a given quantity of food into meat in one-third less time than the Avreshire, and when both are ripe for the shambles, the Shorthorn, by reason of her larger percentage of choice meat and her smaller percentage of offal than the Ayreshire, will command in market a higher price per pound.

Shorthorn breeders have generally given little attention to dairy

qualities. Meat has been their almost sole object, and the practice of letting the calf run with the cow until six months old, and then drying her off quickly to better prepare her system for the succeeding calf, greatly weakens her milk-producing capacity, and, if the disability extends through several generations, becomes constitutional and transmissible to the progeny. There are, however, some excellent dairy families of Shorthorns, and some individuals that for quantity, quality and duration of milk, are not surpassed, and by careful selection and judicious breeding they might, as a breed, be brought in a few generations to the highest standard of profitable dairy production.

#### ENTERPRISE AGRICULTURAL CLUB.

Editor Southern Planter:

The "Enterprise Agricultural Club" of Amelia held its regular meeting, at the residence of Mr. P. B. Crowder, on the 1st of March. Every member present. The election of officers being in order, the following were elected for the ensuing year: John Wingo, President; W. J. Cheatham, Vice President; C. N. Stacy, Secretary; R. E. Bridgforth, Assistant Secretary.

Much time was consumed in inspecting, admiring, and commenting on the many evidences of progress and enterprise exhibited by our host. That large, commodious and conveniently arranged "barn" was the subject of special attention. Located in a beautiful oak grove of several acres just in the rear of his dwelling, it towers high above his other farm buildings which occupy the same grove, and even above the dwelling itself. Our friend is giving one of the best evidences of this when he makes his "barn" his finest building. Next, his tobacco houses, fitted up in the most approved style, with flues for curing bright tobacco, claimed our attention and elicited much interest. We examined with delight the bright products of these barns which reflect so much credit upon the enterprise, perseverance and untiring energy of Mr. Crowder. He deserved the thanks of our people for proving that the finest bright tobacco can be grown in Amelia county; since he has grown, cured and sold tobacco of last years' crop at prices ranging from \$13 to \$59 per hundred, and that too, on land less suited apparently for this character of tobacco than the majority of lands in our county. There is money in tobacco at those prices, but very little if any in the dark grade at present prices.

That beautiful flock of Shropshire Down sheep of which our host is

justly proud—those fine grade-Jersey and Shorthorn cows, with their stalls and lots well bedded and clean, were all objects of admiration. Indeed so little did our Club on this occasion indulge in criticism, (for which they are so noted when opportunity affords) that I must think our friend had "set his house in order" to better purpose than most of us are wont to do. Or may be that change of the order of business, making the inspection of the farm come immediately after dinner had something to do with it. We are not apt to find fault when in a good humour and we are very apt to be in a good humour after partaking of such a good dinner as our hostess set before us. Mrs. Crowder is justly celebrated for good cooking, but on this occasion she surpassed herself. We try as far as possible to discourage extravagance and display in the get-up of our dinners, and prize a plain dinner well prepared more highly than the finest display that can be made.

Our Club has in many ways been beneficial to its members. It promotes sociability and friendly intercourse; increases zeal and enterprise in agricultural pursuits; brushes off the cobwebs of old foggyism and substitutes a newer and better way; stimulates effort by emulation, and increases knowledge by frequent interchange of ideas and reports of experiments. One interesting feature connected with our Club is the offering a premium for intensive farming. Last year we gave a premium of \$15 for the largest yield of wheat on one acre with the report of the treatment; and \$10 for second best. The best acre yielded 44 bushels; second best 38 bushels. A like premium is offered this year, with the proviso that no premium is given for less than 40 bushels. I have written this, Mr. Editor, by way of giving you an introduction to our Club, which is now just entering its third year, but has never before appeared in print. If agreeable to you, I will occasionally send a report of our proceedings and discussions of the "question." The subject for discussion at our next meeting, to be held at Dr. W. J. Cheatham's, on the 1st Thursday in April, is "Corn, embracing all the details of cultivating, manuring and harvesting."

Very respectfully,

Amelia, Va., March 12th, 1883

R. E. BRIDGEFORTH.

[Send us all you can of such enterprises. Details of entertainments may be omitted, but practical facts in respect to agricultural progress and practice are always welcomed.

—Ed. S. P.]

Many men build (their character) as cathedrals were built; the part nearest the ground finished, but that part which soars toward heaven, the turrets and spires, forever incomplete.

#### FLORIDA LETTER.

WOODBOURNE, March 28, 1883.

Col. W. C. Knight, Ed. S. Planter:

I promised to write you, whilst in Florida, something in regard to the agriculture and horticulture of that State, and although my stay there was somewhat prolonged, it was mostly confined to the southern portion of the country, where, what we deem agriculture is but little practiced—fruits and vegetables being the staple products. It is true, that during the past two winters I have passed over much the largest portion of the State, but my line of travel has been very much confined to rivers, lakes and railroads; hence my reluctance to speak in such terms as would satisfy you that my information in regard to agriculture was of a positive character. Of fruit culture I speak from a more thorough investigation.

There is no part of Florida where fruits and vegetables may not be raised to advantage for an early market, quick transportation being given, yet if you are to judge of the capacity for production by the amount and variety of foreign canned goods that you see at the hotels in every part of the State, you would conclude that Florida's capacity for the production of such articles was very limited. The true reason is, that the early fruit and vegetables are shipped to northern markets and command a much higher price than the canned goods can be bought at. The hotel men can make more money by feeding their guests at four dollars per day on canned peas, corn, tomatoes, &c., than they can by buying the fresh gathered articles.

All Florida is pretty much a sand-bank, but in the middle and western part of the State there are large areas of the "high pine land" that have an intermixture of lime and clay that adds to its fertility and permanence, and that has capacity under proper culture for producing good paying crops of various agricultural products, besides cotton. More grass, more corn, and more stock, with the pea for an improver instead of commercial fertilizer, would add to the profits of their farms. The rich hammock lands bear a small percentage compared with the whole area, and are mostly confined to a narrow margin along the shores of the rivers and lakes.

The region of country south of Palatka on the St. John's, seems better suited in climate and soil to the growth of the orange than more northern portions of the State, and it is there you see the most extensive plantings. The Indian River country is better for all tropical and semi-tropical productions, but it has labored under great disadvantage

for the want of quick transportation—a want that will soon be supplied. The orange tree is of slow growth, is a gross feeder and requires much attention. The quickest method of obtaining a tree that will produce a paying crop, is by budding on sour orange stocks. By that method and proper cultivation, you may get trees large enough to produce a remunerating crop in seven or eight years. Seedlings require a much longer period. From all the information I could obtain from the experience of others and from personal observation, it seems conclusive that the plow should never be used in an orange grove. Light harrowing or any other method by which the surface is kept clean is preferable.

Perhaps the most thrifty grove that I saw, was one of 1500 trees belonging to Dr. French, near Sanford. He told me that all its excellence was due to surface cultivation and top dressing or mulching with the surface soil and trash taken from a poor pine forest adjoining. Not a particle of commercial fertilizer was used. The cost was comparatively small and the result as I have stated. In going through his grove you could at any point expose a net work of spongiole roots by scraping to the depth of one or two inches. Orange trees are subject to blight and injurious insects. I have seen quite a number of large trees that have died and others that were in a dying condition, though the common talk is that an orange tree will live an indefinite period; and when you take into consideration the labor, expense and time required to bring a grove into profitable bearing, it is a little discouraging to a new beginner. When all the difficulties are overcome, then a good bearing grove will yield fair pay—say ten dollars to the tree.

The portion of Florida which I think has the most promising future, is the Indian River country in the southern part of the State. It is a healthy region with a most delightful climate, and you can grow positably several tropical productions that cannot be grown elsewhere; notably: Pine apples and cocoanuts. Oranges and the whole citron family attain great excellence, and strawberries, tomatoes, pear, green corn, potatoes, squash, beets, &c. &c., can be raised and shipped from that region early in February. I have also seen samples of cigar tobacco raised there that would have done credit to Cuba. The cocoa palm, the prettiest of all the palms, takes several years to come into bearing, but it is said to be more profitable than the orange. The pine apple will produce fruit in two years from the planting, and one planting will last five years. It requires but little work after you get the plants started, and thrives more on land of moderate fertility; thus enabling you to plant your oranges, bananas, vegetables, &c., on your best, or

hammock land. An acre of land will contain 10,000 pine apples and at a very low price the crop would be very highly remunerative.

Whilst I am extolling the profitable productions of the "Beautiful Indian River with its evergreen shores" there are a few peculiarities which I must mention, which, if you go there, will prove more interesting than profitable. I allude to the insects of the country, musquitoes, chigres or red bugs, sand flies, and fleas. Thank goodness there are no bed bugs. Their eternal summer makes everybody lazy, and a stay of a few weeks will make you feel the need of a more bracing atmosphere; and thus while you refresh yourself with the lucious fruits and breathe an atmosphere laden with more sweet scents than "Araby" could boast of, you will have a lingering, longing remembrance of "Old Virginny" ham, beef, mutton, milk and butter, and of the friend you left in dear old Richmond.

Florida is fast being taken possession of by Northern and Western people, and their enterprise and thrift will not only make it a "land of fruits and flowers" but much of the substantials of life will be raised on its sandy soil; and its Atlantic border will be the resort of the afflicted and the pleasure seeker. Already "patent insect powders" and "patent refrigerators" are being introduced, and in the near future all the pests and inconveniences in excess of the reasonable powers of endurance, will be eliminated; and should there be any royal claimants dissatisfied by the arrangement, their grievances will be relegated to a superior power.

Now my dear Colonel, I have endeavored to give you a few disjointed facts—not "orient pearls at random strung" but scattering observations which your genius may contrive to string into an article worthy of insertion in the columns of the *Planter*.

Very truly yours,

CORBIN M. REYNOLDS.

[We sincerely thank our friend Col. Reynolds, for his interesting communication. The liberty given us in the last paragraph justifies us in saying that there is not an ito be dotted, or a t to be crossed. We know that it will commend itself to our readers in Furida, who will see what an intelligent visitor thinks of their State and its wonderful characteristics of climate and production. It will be equally interesting to our readers in Virginia, for the reason that it comes from one of the most worthy and intelligent of their fellow-citizens; and our readers further north will value it because it tells of a genial and sunny "clime which the Sun's bright circle warms" within the boundaries of their own country.—Ed. S. P.]

Parian marble was obtained from Mount Marpesia, on the island of Paros, and was sometimes called Marpesian marble.

#### SWINE RAISING.

Editor of Southern Planter:

A farmer in the northwest says he at first tried "scrubs" and "mongrels," until thoroughly disgusted; he also tried the plan of keeping old sows to raise pigs, but found it an expensive way of getting a stock. It proving a losing business to raise hogs except for family use, he gave up the idea of raising them to sell. After ten years' experience in this way he procured a litter of Poland-China pigs, and, having by this time a good hog pasture of blue grass and clover, began to raise hogs to some profit. He abandoned raising wheat to sell, and went to raising cattle and hogs, feeding up all the grain raised, and after that buying what was wanted. He stopped keeping old sows over and soon would not be caught raising more than one litter from a sow. He managed to have all the sows to farrow in May, and then they will be a year old by the time they drop their first litter. The choice sows are selected for breeders, and fatten all the rest with the barrow pigs, selling at about a year old, making the pigs over age from 250 to 280 pounds. As soon as the sows which raise pigs are through suckling, they are fed for winter market, and he hardly ever fails making them go to 380 to 400 pounds average.

Farmers raise hogs for profit, and the process that will yield the greatest return is the best to pursue. No farmer can raise hogs at a profit who does not have a good pasture of blue grass or clover for them to run in from May until November. The sows must have rings in their noses to keep them from rooting out the clover. As soon as the pigs are old enough to wean they may be shut up in a pen and fed corn until the sows are dried up, and then the pigs can be put in the pasture again. He has a feeding lot of ten or twelve acres, with running water in it most of the time. He plants ten acres to corn and has one acre of artichokes. As soon as the frost kills the artichokes, all of the hogs are turned in together, having first gradually accustomed them to a corn feed, for their feed must not be changed suddenly. The rings must be taken from the noses of the old hogs so they can get the artichokes.

As regards the value of artichokes for feeding hogs, he has no hesitancy in saying that they have been highly profitable, they keep the hogs healthy, and that they furnish more feed to the acre than does corn.

In the summer and fall, a kerosene barrel filled with water from the well: into this barrel put a can of concentrated lye, and give this

water for their drink about three times a week, which keeps them clear of worms and in good appetite. A pig should never be allowed to get poor from the time he is dropped until he is ready for market. If they once get stunted, they never get over it, and the profit is lost They may pay their keeping but they will not make money. Hogs are not raised for the fun of it; the farmer is after the profit.

Hogs should have a warm, dry place to sleep in. A dry plank floor, is best in all weather. Unless there are but few hogs together the sows selected for breeders should be taken from the rest of the lot by the middle of November, and, as they will be pretty fat should be put on moderate feed; and on the first of January he begins turning them in with the boar, one at a time, as they come in season. A memorandum should be kept of the serving of each one. They will farrow in from 112 to 120 days. Each should be put by herself two weeks before her time for farrowing, and kept there until her pigs are big enough to fight for themselves. Trim the males before they are three weeks old. Keep none entire unless you want them for sale. In the fall or sooner, buy a good thoroughbred boar, no kin to your own stock. you cross with a fine Berkshire boar every third or fourth year, all the If these rules are followed, you will raise fine and profitable hogs. Nothing is known of hog cholera, not having seen a case in all my experience. M.

#### RENTING LAND AT THE SOUTH.

A correspondent of the Planters Journal is of the opinion that one of the principal causes which tend to prevent the Southern planter and farm laborer from obtaining a good profit on their undertaking, is the reluctance with which the laborer seems to take hold of the idea of working for another. The idea of hiring out to a planter by the season or by the year, as New England farmers' boys often do, as soon as they come of age, and then to save their wages for a few years or till they have accumulated enough to part pay for a farm of their own with stock and tools to work it with, is one that seems hardly to have entered the heads of our Southern laborers. The "poor white" and the negro will rent land and on business on their own account, even if they have to hire their single mule and run in debt for the seeds they plant, taking all the risk of bad seasons and low prices for crops and high prices for provisions, tools and fertilizers. Perhaps as they have nothing to lose, they consider the risk light. But on the other hand, if their crops are good, the high rates charged by the merchants who advance supplies and take a mortgage on the growing crops, leave very little profit at the end of the year that can be placed to personal credit.

The difficulty is, labor is still looked upon as being rather undignified, so the poor man will attempt to carry on business rather than work out, even when the chances of success are heavily against him. It is also probable that enterprising planters of ability and means are not very plenty who are ready to hire farm laborers at liberal rates of wages. It will take a long while to Yankeeize the South and infuse into her people the energy, enterprise, thrift and self dependence of the Northern farmer or farm laborer who is aiming to secure a farm of his own. Yet there is very marked progress being made. The South is beginning to be developed by outside energy and capital, and a good example will generally find followers everywhere. The South has been asking for northern aid, and where northern men are cordially received and fairly treated, prosperity is sure to abound. The South has wonderful resources which only require the hand of industry to develop.

#### ENSILAGE.

Is it a valuable process? From the first introduction of this process of preserving green food, I have had strong faith in it. I believe it affords the most sure and effectual mode for supplying stock with proper food.

Besides the experiences of Messrs. Haxall and Guy near the city, I observe in the Vermont Farmer, the organ of the farmers of the State of Vermont, that there are largely over one hundred silos in annual use in that State, and the number is increasing. There is probably no State in the Union where such a process would be more critically tested than in Vermont, for the reason that so many depend on their dairies and stock farms for a living.

In the last number of the American Cultivator, published in Boston, which stands very high as an agricultural journal, I find the following:

Ensilage in New Jersey.—While the adoption of the ensilage system has spread enormously during the past year or two, it may be doubted whether so valuable and exhaustive a test has been made as at Mountainside Farm, New Jersey, the property of Theodore A. Havemeyer of New York city. It was a bold measure, several years ago, to substitute ensilage exclusively for hay in the feeding of one of the finest and most valuable herds of Jersey cattle in the world, a herd that would probably sell at auction for upwards of \$100,000 and where

the income from the sale of high bred calves was of the first importance. It was still bolder from the fact that in so doing the grain ration of the cows was cut down to one-half that which had been previously fed with hay, causing greater physical dependence upon the new food. It was still bolder when, having passed through the winter, the cattle were not turned upon pasture in the spring, thus giving a respite from ensiloed food, as has been the custom elsewhere. From October, 1881, until now, the entire herd, old and young, were kept upon ensilage, without intermission, save occasionally when, for a day or two, a change was made for the sake of experiment. The result has been, that, with half the amount of grain formerly fed with hay, the same cows have averaged over 100 pounds (fifty quarts) more of milk per month than they did on the old diet. Their coats look glossy and sleek, and every indication is that of blooming health. calves that have been dropped upon the place from silo fed parents, themselves silo-reared, are pronounced without dissent by the hundreds who visit the place to be of the best quality and in excellent condition. It may be doubted whether another lot of animals equally large, vigorous and healthful at various ages can be found short of a climate that affords pasturage the year round. While much of this condition is due to the fact that the parent herd, both as regards the imported and the native bred animals, was selected with an eye to constitution and superior physical capacity, their blooming condition is unquestionably due, in a great measure, to the method of feeding.

Notwithstanding the undoubted success of ensilage feeding, Mr. Havemeyer and his foreman, Mr. Mayer, admit there are some facts connected with ensilage that are hard to account for. While it appears improbable that the feeding value of green forage could be improved upon its natural condition when fresh by stowage under pressure in a pit, the experiments at Mountainside Farm raise the question at least to the dignity of a debatable one. When in August last the working force of the farm was concentrated upon the great work of transporting the fifty acres of green corn fodder from the fields in which it grew, through the giant cutters and carriers, into the great pits where it was to be preserved for the coming year's use, a pit of ensilaged rye fodder which had been stored earlier in the season, and from which the herd were being fed, gave out. To open a new pit would be to divert the use of the machinery and the time of three or four men from the special work of harvesting, to which all energies were being devoted. Mr. Mayer therefore ordered that several loads of the corn fodder cut fresh in the field should be placed before the cows instead of their cus-

tomary feeds of ensilage.

Now, every country boy who has had to drive the cows out of the cornfield and noted the persistence with which some cunning old cow will find or make a hole in the fence to get back, knows that cows like corn fodder. That they ate it with great relish was evident, and they ate a much larger quantity than they did of the rye ensilage; nevertheless, with the same grain ration, they fell off in milk. Thinking the result due to the fact that the ensilage had had the advantage

of having passed through the cutter, the fresh corn fodder was then submitted to that treatment instead of being fed long, but the milk continued to diminish until at the end of three days the average daily shrinkage per cow was four pounds (two quarts), which, when tested in quality, showed two per cent. less cream. A new pit of ensilage was opened, and in two days the cows were back to their full flow. This comparison between ensilaged rye and fresh corn fodder is the more surprising from the fact that as a fresh feed rye fodder is inferior to corn fodder.

I cannot imagine tests any stronger than the above, and if I were a practical farmer, I would not hesitate a moment to go on to prepare for securing enough proper material through this process for feeding bountifully all the stock I might have and all I had the money to buy.

It seems to me to offer a most sure and easy way for not only getting the stock in Eastern Virginia through the winter, but also of adding to the income of the farmer in selling in the spring months some fat stock after having made a good supply of manure for the land on which the green crop grew.

Yours truly,

April 3d, 1883.

RICHD. IRBY.

[Within a few hours after the foregoing communication had come to our hands, we met at the city post office a valued subscriber to the Planter who introduced the subject of ensilage in conversation; and after complimenting the article of C. N. S. in our March number, said he had been deterred from trying the process by what appeared to him a great trouble in handling the rocks, on and off, which were used for compression. He suggested that the common tobacco screw might be used and save the annoyance of rocks, and, at the same time, make a silo more neat and complete in its arrangements. The idea struck us as a good one, and practical, as we will attempt to explain. method of pressing ensilage with rocks reminds us of the primitive tobacco prize. may be briefly described, thus: A stout growing tree was selected, and at a proper distance above the ground a rude mortise was cut through it with auger and chissel, and the body of another tree, unbarked or hewn, of the length of about twenty feet, and an average diameter of about ten inches, with a tennon cut at the large end to fit the mortise in the tree and projecting a few inches beyond, so as to be secured by a large wooden pin, furnished the principal points. The prize-beam, so called, being put in place, two stakes about fifteen feet high were set in the ground near the end of the beam, one on each side, and over the top of these stakes was placed a roller over which a rope, or more frequently a grape vine, was thrown and attached to the end of the beam, and by this means it could be raised, by proper manual power, to an angle of about forty five degrees, and thus allow the proper blocks to be placed on the head of the hogshead after it had been filled with tobacco. The pressure was then brought into play by loosening the rope or vine, and the weight of the beam brought down all its power. This was supplemented by what was called the pea, which was a section of another log about six feet long, and hung by a huge hickory withe over the end of the beam, and this pea was loaded with rocks held in a sort of cradle formed by wooden pins and loose planks. Of course, with every filling of the hogshead, some twenty odd in number, the rocks had to be removed and replaced.

This rude method of pressing tobacco was superseded by the lever press, and of this

we might have something personal to say, but have not time or space to say it now. With the best tobacco growers the lever is now disused and the *screw* has been substituted.

We now come back to our starting point, which is, that the pressure of ensilage need not *commence* in the rude way in which tobacco started, but should be governed by experience since acquired.

We can see no reason why a screw may not be used in pressing ensilage. Take a silo eight feet square, and so arranged that an ordinary tobacco screw affixed in a strong beam so bearing over the centre of the pit that its pressure may be brought to operate evenly. After the ensilage has been firmly trampled down, place two inch boards transversely over the whole, then lay beams longitudinally—say two or three—and across these and immediately under the screw another strong beam. Let the screw then be set to work, and if it runs its length before the proper pressure is obtained, raise it quickly, block up, and renew the pressure. The screw should be felt each day and a turn or two more added until by the shrinkage, no further pressure is required.

If silos of greater length are desired, add a screw for each eight feet of length. We have suggested the length of eight feet, but in practice a less length may be required. The idea is all we are wanting to suggest. Practice in this, as in other things, must make perfect.—ED. S. P.]

#### GATES.

There are a great many kinds of gates. Every man has a gait of his own that he carries with him when he moves around. We do not mean that gait, but the gate that a man passes through when he enters or leaves an enclosure in a legitimate way, and does not climb over the fence. When Sampson left Gaza he was accompanied by one of both kinds you remember, but that has really nothing to do with this article, neither has the *Wei ghets* of the German. We are coming to the subject directly. What a difference there is between the gates or portals in England and in other parts of Europe, and those that impede travel out on Onion creek, which is a part of the United States.

When an English editor calls on some earl or noble marquis in a social way, or to collect arrears of subscription, he rides up to a stately portal at the end of a flower-bordered avenue, shaded by noble ancestral elms. From the ivy-covered porter's lodge emerges the venerable form of one of the nobleman's family retainers. He opens the gate, and bowing low with uncovered head, and with the dignity and bearing of an archbishop, motions the coachman to drive right in. When the editor hurls toward him a silver coin of the capacity of a dime, the old man's howls of joy and gratitude may be heard for miles.

We have a very different kind of arrangement in this country. When an editor goes out to visit a friend on Onion creek, the first thing he does not see is the kind of gate referred to above. The Onion creek gate, we mean the average gate in that neighborhood, has to be opened by yourself, a great deal of exertion, and a fence-rail. There is no obsequious menial to come out and open it for you, but there is a hardy pioneer, in a rude cabin close by, who will come out and use

language to you, and intimidate you with a gun if you do not shut it

after you have succeeded in opening it.

It requires marked ability to open the average Texas gate. It is usually adorned with the rusty remnant of a hinge, and the only thing that connects it with the post is a piece of old rope that is tied on just loose enough to enable the gate to fall over on one side and knock you down in the mud. If you are strong enough to hold it up, you have to lift one end of it on your shoulder and curve your spine in an attempt to carry it around in a semi-circle. Some gates have neither rope nor hinge on them. We have one of these in our mind's eye as we write. When you touch it, it tries to fall down on you and crush you to the earth. If you succeed in baffling it in that attempt, it falls over the other way and drags you over on top itself. It would rather lie down than stand up, and it does not do the least bit of good to get angry with it and kick it. In a fierce struggle for the mastery with a Texas gate it is best not to allow the gate a moment's breathing space, for if you do, it will lie down to rest, and it is with difficulty that such a gate can be aroused when it is peacefully at rest in the mud. with pleasure that we have noticed a resolution sent to the Texas legislature from the stockmen's convention, in which the stockmen recommend the legislature to pass an act requiring all pasture gates to swing one foot clear of the ground, and to declare all other gates a nuisance. It would take a strong quorum of the legislature to have much influence on some gates we have wrestled with, but it won't do any harm to call them a nuisance.—Texas Siftings.

#### GARDENS-THEIR MANAGEMENT AND IMPORTANCE.

To the editor of the Planter:

Having enjoyed a good garden, stocked, as it was, with all kinds of small fruits, such as strawberries, raspberries, gooseberries, currants, &c., and, taking much interest in planting and cultivating all kinds of vegetables, I may venture to make some suggestions upon the subject in the *Planter*, hoping that they may be of interest to some of your readers.

I always manured (stable manure) heavily, and broke up my garden in the fall or early winter, replowed or spaded in the spring, using as a top dressing, fine well rotted cow-pen manure, which was also turned under at this plowing. (The application of stable manure in the spring tends to create too much heat and to burning up the crops) The soil, which now will be found mellow, should be put in thorough order with the garden hoe and rake to receive the seed. When ready to plant, make a business of it, by taking all hands on the place, and under the supervision and direction of the proprietor, who, if he has not much

experience, can be aided by the seed book or pamphlet, furnished by all agents selling Landreth's seeds, and which can be found in nearly every village in the country. These books furnish much information as to planting and cultivation. The summer crops, such as garden peas, cucumbers, cymlings, and snaps, for early use, (tomatoes should also be included) must be planted where they will be least liable to suffer from drought; dry weather is death to them, and at best you have indifferent tough vegetables, if the location does not suit the season. Their duration is also very short. A moist location for them will furnish nice, tender vegetables in dry weather, and they will continue to bear for weeks. The cucumbers and cymlings until frost.

After planting, then comes the most important part. Everything must be worked and cared for by thinning out, &c. The working can easily be done, if taken in time, with the garden hoe and rake. No grass or weeds must be allowed to interfere at any time during the bearing of the crop. The result will be a nice clean garden, stocked with vegetables which will furnish more than half the living to the family, but which if allowed to be taken with weeds for the want of work, would seem an unpardonable neglect.

I have seen much interest manifested in preparing and planting out gardens, and everything about them working very well; but, in a few weeks, from neglect to work them in time, they were completely overrun with weeds and grass, presenting a most desolate appearance, the table consequently exceedingly bare of well filled dishes. others, (and many such) who have no use for a garden, except for the raising of cabbage, potatoes and onions. Mr. Editor, it seems to me there has always been too little interest taken to plant and stock our gardens with all kinds of small or garden fruits; they are all nice, and, if a little trouble is taken to raise them, they will supply and beautify the table each day nearly through the whole summer with some one or other variety, beginning with the strawberry, the others coming up in succession. The currant (much neglected) is the best and most useful of them all. It never fails to bear heavily, and does not perish or give out soon, but will furnish fruit for months. In the hot days of July and August, this fruit furnishes a most delightful drink as a substitute for lemonade; a few drops of extract of lemon improves it. They make a better tart or pie than the gooseberry, either green or dried for winter. Currant jelly excels all other jellies.

J. W. W.

As every thread of gold is valuable, so is every minute of time.

#### WATERMELONS-PROTECTION AGAINST BUGS.

Editor Southern Planter:

As it will soon be time to plant watermelons, it may be not out of place (even to our Hanover friends, who raise them as fine as can be found anywhere) to make some suggestions about protecting them from the ravages of that little enemy and destroyer—the yellow or striped bug. The young vines are frequently destroyed by them in twenty-four hours after they come up. To protect them against this little enemy, until the vines are large and tough enough to be free from much harm from them, is to enclose the top of each hill, when the seed are planted, with four shingles (as broad as you can get them), which is done by imbedding them slightly in the ground, inclining them inward to each other, and compacting a handful of earth against them on the outside. You then have, as it were, a box around them. This is a little trouble, but it had better be taken than have them destroyed and the consequent replanting and throwing back the crop a week or so.

It is too obvious to explain how and why this method will shield or protect the vines from the bugs. Suffice it to say, they don't get within the enclosure. I discovered this plan after losing my cucumber and cymling vines repeatedly during one year in my garden, and they should always be protected, as it is a small job to do so. When the vines are large enough to thin, the shingles should be removed to a shelter, and they will last for years for the same purpose.

To raise a late and fine crop of tomatoes, be sure to stick into each watermelon hill a tomato plant. They do not interfere with the former, and come in after the garden crop gives out. Those coming in late are the best for canning and putting up for winter use.

IRRIGATION has been largely practised in this country, and where it has been it does not prove profitable except for a few special crops like strawberries, which bring a large sum from a small area. Labor is too dear in this country for the adaptation of many of the methods successfully practised in Europe. Besides, in most sections, the annual rainfall is sufficient, if due care is given, to making a deep, mellow soil that will hold a heavy rainfall without washing the surface.

In character, in manners, in style, in all things, the supreme excellence is simplicity.—Longfellow.

Dost thou love life? Then do not squander time; for that is the stuff life is made of.—Franklin,

#### FAITHLESS ADVERTISING, HUMBUGGERY AND SWINDLING.

Editor of Southern Planter:

On reading Mr. J. O. Smith's card, in the last *Planter*, on "Faithless Advertising," I was reminded of a purpose I had long had in mind to say a word or so on the same subject. The practice of such advertising has attained such dimensions as to have become a public grievance.

There are, doubtless, many valuable things advertised by parties who aim at nothing but honesty and fair dealing, and if we could always discriminate between the worthy and unworthy, no harm to the public could arise. But there are so many that we can know nothing about, presented in the most plausible light, proposing to furnish on so many days' trial, and to refund the money if not found satisfactory-all intended as a trap to catch the young and unwary, that it is my decided conviction that it is wisest to ignore everything of the sort, except from reliable and undoubted sources. The advertisers require the cost to accompany the order, for (as they say) their protection; but offer no protection to the buyer but their promise, which they contrive by one subterfuge or other to render nugatory. Where there is doubt, it is wise to let all such advertisers alone. In nine cases out of ten they are swindlers or mere catch-pennies. Better let even a good thing alone, than run the risk of losing one's money or getting no adequate equivalent for it.

Let these faithless advertisers continue their work. We know they will. The organs through which they work will be pecuniarily benefited, but the people will act wisely if they exercise great caution, amounting almost to repudiation, in patronizing these faithless advertisers.

The above counsel and caution have been prompted by the observation and experience of one over four-score years of age, who is cognizant of some of the most glaring swindles perpetrated upon the young and gullible part of the community. It is not his purpose to dissuade any one from patronizing enterprises known to be fair and reliable, but to warn against those not known to be such.

Fluvanna. M. B. S.

Go with mean people and you think life is mean. Then read Plutarch, and the world is a proud place, peopled with men of positive quality, with heroes and demigods standing around us, who will not let us sleep.—*Emerson*.

#### INCUBATORS vs. HENS.

Whether there is more profit in artificial hatching than by the services of setting-hens is an unsettled point, for everything depends on the management in either case. That there are good, reliable incubators is a fact, but that "a child can manage them," as is claimed for some, is not established to the satisfaction of many adults who have engaged in such work. The advantages in favor of incubators are that chicks can be hatched at any season, the danger of vermin is lessened, and cleanliness is facilitated by the method. By early hatching, the chicks come into market to sell at high prices and the pullets that may be kept over will lay in the fall and through the winter. The disadvantages are, the possibility of danger from oil-lamps that are kept continually burning, and the liability of accident, or irregularity of heat, which may destroy all the eggs. A slight accident to an incubator holding several hundred eggs, at a time when eggs are scarce, occasions a heavy loss, and one or two occurrences of such character rather weakens the faith of the operator. It is better, therefore, if large numbers of chicks are to be hatched, to use several small incubators, in preference to a single large one, for then an accident to one incubator will not occasion an entire loss. No matter how well they may be regulated experimenters will have to watch them carefully, as the weather, turning the eggs, and providing moisture call for regular and prompt attendance at certain periods. Some incubators are heated by gas, some by projections of the stove pipe, and others by large quantities of hot water. Nearly all of them will hatch, by prompt attention and management, but that they bring forth ninety per cent., as claimed, cannot be depended on. After the chicks are hatched' they are reared in brooders, which are heated in several ways, generally with hot water, the heat being appreciated by the chicks when it is above them, as few survive when the heat comes from below.

In managing the hens, however, the nests should be placed in warm locations in winter and cool places in summer. If the flock is large the hens will commence setting at different periods, and an advantage may be taken of hatching by using the following plan: Suppose, on the first day of April eggs are placed under a dozen hens, as all can be set at one time by keeping those that get broody before the others a few days, and suppose after the lapse of ten days a second dozen are set; and we will further suppose the breeder to continue the practice by placing eggs under all the broody hens on the same day, when a sufficient number is ready. Now, we go back to our point: when the

first dozen have finished hatching, give all the chicks to as few hens as can properly carry them, and take eggs that are under the second lot and place them under the remaining number in the first lot. Then reset the second lot with fresh eggs. We can by that method keep each hen at work four and a half weeks, and two hens will hatch three broods. We give the above as a supposition. It is entirely practicable, and also profitable, and with the same care and management as is required for incubators will give much better results. The hens and incubators may be managed together by placing eggs in the incubator every day or two, and when the chicks are hatched give them to the hen to be cared for. This will save valuable time on the part of the hens, and will enable the brooders to raise a large proportion of chicks. We have no doubt that many of our breeders dread the care of the chicks more than the fear of bad hatches, but the hens will assist the incubator in that respect.—New Southern Poultry Journal.

#### CUTTING POTATOES FOR SEED.

Editor Farmers' Home Journal:

It is too generally the custom when cutting Irish potatoes for seed, to cut at random, heedless of the number of eyes to the piece, and the depth to which the pieces are cut. Farmers are often in too great a hurry at planting time, waiting until almost the last moment and then rushing up matters, and frequently losing in the end. Potatoes should be cut before hand, and spread out to dry. Says D. F. Heffron, the originator of the famous Early Rose, and, perhaps, the highest authority in America, on the Irish potato: "Cut sometime before planting. It is said that potatoes cut four or five weeks beforehand, if dusted with lime and plaster, and spread out or stirred frequently if in heaps, to keep from heating, will ripen ten to fourteen days earlier than if cut and planted green. Potatoes sprouted in a warm room or hot-bed, will likewise give an earlier crop." The microscope reveals delicate filaments running from each eye or bud of the tuber, towards the center of the potato, hence, in cutting for seed always cut deep, so that the growing bud may derive all the nourishment nature intends for it. The hair-like rootlets show that the eye, when developing, feeds on the substance of the potato. Says Heffron: "The tuber is a short, thick stem, and each eye is a side shoot, that feeds on the neighboring starch. Then, if an eye is cut to the center, it takes in the whole branch, and has enough flesh to nourish it. The eyes are arranged spirally in the potato, and all of them can be used if desirable, by

cutting half way between them, and always cutting to the center." He gives some admirable suggestions about planting, and after-culture. He advises to plant as early as possible either of early or late varieties. "The worse attacks of the bugs are late, and a sacrifice of some qualities, is better than a sacrifice of the whole crop. Early planting gives a start to the plant that enables it to resist drouth to a great extent. As regards quality for table use, and as a better keeper through the winfer, late varieties are preferred to early. Choose for seed a smooth, medium sized or large potato, cut it into pieces having one or two eyes; a large potato cut to one eye is expensive seed, but is said to be the best possible. Plant in hills or drills to the depth of three and a half or four inches if the ground is light and mellow; if in wet, heavy soil, a depth of two and a half or three inches is sufficient. Rapid growth is best for all vegetables; help the potato crop to it by thorough after-culture. The old idea that frequent stirring of the soil dries it out is an exploded one. About a week before the tops show, harrow thoroughly, it will kill the young weeds just started. As soon as the tops appear, begin to cultivate, and so cultivate, until the blossoms show, but no later. If weeds show after cultivation is over, hoe them out or pull up. In hoeing always draw the earth to the hilled potatoes, it gives them added nutriment." Give the potatoes room, it is folly to have them so close that you cannot see the ground.

Yours,

Rusticus.

#### THE ORIGIN OF COFFEE.

### The Strife which was Occasioned by its Introduction as a Beverage.

It is well known that the coffee plant is not indigenous to Arabia, but was imported from Abyssinia at a date which cannot be accurately given. The taste of coffee itself had a hard struggle at first to find a general welcome among the more select circles. Apart from the oldest legend concerning Shadel's drink, the Medina Sheik Abd-el-Kader is the oldest historical authority on the use of "blod red-Kaweh," as the Tunisian Ibn Waki named to the beverage. In the year 1587, not three hundred years ago, he tells us that in Yemen, people made use of a drink which so lightened the night-watches that the faithful of the place were able to sing the praises of God more fervently and cheerfully than could be done anywhere else. According to him, the Mutti Dhabani was the first to introduce the insignificant little bean on Arabian soil, having brought it with him from Africa.

Certain it is that the districts of Shoa, Euarara and Kaffa (whence the name), in the south of Abyssinian highlands, form the original home of the coffee plant.

Dhabani was of a sickly nature, and since he belonged to the order of the Sofi (Ultra-Pantheists), who believed that everything on earth and all being emanated from the Godhead, he regarded a means of excitement of this kind a providential gift. The Medinese and faithful Meccans laid their turbaned heads together in the public places when first they heard the news; a pious sheik in Aden was the first to drink the "black juice" as a sort of public spectacle. In Mecca itself, violent strife arose soon after its introduction as to the propriety of using it. There were great meetings of learned and pious men, who at last, probably after extreme pressure from the Mameluke Governor, Khair-Beg, declared that coffee "disturbed the brain and intoxicated like wine."

But their opponents were of another opinion, and adduced the authority of the celebrated Bagdad physician, Avicema, in their defence, which, however, did not prevent the transgressor of the edict forbidding the use of coffee from being publicly whipped. At the same time the zealots of the Hedjas proclaimed that all coffee-drinkers would appear before the All merciful on the resurrection day with black faces. While the great anathema was being pronounced at Mecca, the brothers of the order at Cairo, the very Mamelukes themselves, were reveling in the newly-discovered luxury. A confirmation of the Mecca degree was, therefore, not to be expected from the Sultan, and he, Kanfu Alguris, quashed the order of his Governor, and sent the latter into exile. Then many holy sheiks (for example, the celebrated Mohammed Harife, founder of one of the fodr orthodox schools of Islam), took the side of the coffee-drinkers. Thus was the precious bean fully rehabilitated in western Arabia, at least.

#### ROTATION.

Mr. Editor:

In answer to my request, I am gratified to find the March number of Southern Planter to explain the six-field rotation of crops. The April number gives the seven-field system of same by one of your able contributors. I am truly thankful for both of these instructive articles. But it seems to me that the system of rotation is very likely practiced on a smaller number of fields—say five fields, and it may be even four; and I especially desire to have the process of rotation for the tive-field system from the practice, or experience, of either yourself or some one of your able contributors. Please do me the favor, and oblige,

Bedford County.

THANKFUL SUBSCRIBER.

#### CORN CULTIVATION.

Mr. Editor:

Will you do me the favor of correcting one word in the article on farm improvement published in your February number: the last word on page 72 should be *rust*, not rush as printed. Finding my article alluded to has produced considerable interest in the minds of your readers, as has been evidenced by the number of letters received from them, and you having so courteously offered your columns for further contributions, I will give my views respecting the preparation of land for corn, and its cultivation, as that is the important spring crop with most Virginia farmers.

First in order is uniformity in the plowing; this should be done at a regular depth (on most land) say of six inches. Corn must have heat and moisture as well as rich earth to make a successful crop. I prefer preparing the land thoroughly after plowing by frequent harrowing before planting; in other words, cultivate the corn while out of the ground, and then immediately after planting harrow again, and if the ground is dry, roll with a medium weight roller. As the corn makes its appearance above ground, harrow again, and keep the harrow going at short intervals to prevent grass or weeds from growing or the ground from forming a crust. When the corn has become too large to use the harrow with safety, have the cultivator kept going every ten days at furthest. Be sure to keep the ground clean, mellow and level. the land is flat and of stiff clay, surface drainage must be provided for. I have found clean flat culture on rolling lands and loams to produce by far the most remunerative crops. This system of cultivation will make a good crop of corn on good land even in a dry season. If the land needs fertilizer, use 200 lbs. of acid phosphate and kainit in the hill, and 200 lbs. broadcast immediately after planting, then harrow thoroughly, fining the soil, and keeping it loose is the proper method to make a corn crop. Keep the cultivator going until the corn is in tassel. My farm when I purchased it four years since, had some one hundred acres in corn, and on each side of every row of corn was a ditch, the earth or bank thrown up between these four feet ditches had the corn planted on it, and of course suffered with drought. Every rain which fell ran off immediately, and did not only deprive the corn of the moisture necessary for its growth, but as my land is rolling, carried quantities of rich earth to the river. I found every farmer I knew of in the county cultivating their corn by this system, which they thought indispensable. This system is generally adopted

in the Northern-neck I believe, and I can only account for it from the fact that farmers generally are too apt to act as automatons, following a beaten track, and many of them thinking it almost a sacrilege to vary their mode of farming from that of their great grandfathers, forgetting that their ancestors farmed virgin soil under entirely different circumstances from those which surround our generation. sure that when the average farmer realizes the effect produced by keeping his corn plant on a ridge of earth, he will try to get it on a level as soon as possible; he certainly knows that the ground forming the ridge dries out very much sooner than if it was level. Perhaps he does not realize that corn being a surface feeder requires uniformity of surface to insure its most perfect development, and that when he throws a bank of earth around the stalk, that he is partially girdling it. Nature provides the stalk with props preparatory to supporting the ear when formed. These props are thrown out from the very first joint above the roots or feeders, and if this joint is covered with earth as is the case in hilling the corn the result is stagnation in growth, until the joint above this re-supplies the props, and the roots change their position, seeking their natural and indispensable element, heat. Now, just in proportion to this stagnation of growth, does the farmer loose in his prospective crop. After showing a number of farmers in my neighborhood their error they have adopted flat culture, and acknowledge it to be by far the most satisfactory. This plan leaves the land in the best possible order for fall seeding of wheat, and by preparing a seed bed, and using from 200 to 400 lbs. of acid phosphate and kainit per acre according to quality of land with the wheat when seeded, and in spring harrowing the wheat and sowing not less than one gallon of clover seed per acre and then rolling, the land will not only give a satisfactory crop of corn and wheat, but will be in a rapidly improving condition. T. R. CRANE.

Mantua, Va., April 4th, 1883.

Note.—In applying acid phosphate in the hill of corn, be sure to mix it with a small quantity of earth; this can be done easily and rapidly by slightly drawing the toe of the boot or foot through the side of the hill immediately along side of where the phosphate is deposited as the dropper of the phosphate makes his step to the next hill; then have the corn dropped upon this and covered at once.

T. R. C.

[ We thank our correspondent for his seasonable communication. Our typographical error in his former article being corrected by himself, we have only to express our regret that it occurred, and the hope that the *Planter* will frequently hear from him in respect to his farming practice.—Ed. S. P.]

#### THE HORSE, MULE AND OX.

[For the Southern Planter.]

Furnish the motive power that runs the farming interests of this wide world, without which human prosperity would be at an end. They are given to man as aids, co-workers—to draw from mother earth all the needed blessings of our mortal existence. All other powers, steam, electricity and what not, may be dispensed with, and with these dumb creature-servants, willing and ready always at man's beck and call, man need want nothing to supply his every want-physical or temporal. And yet how sad and how painful is it to see these poor brutes half starved, half cared for, half geared, doubly loaded, toiling willingly a double number of hours, in many cases in every twentyfour hours of each day and night, often without food or water whilst at work, with great and painful sores on backs and shoulders, doing all they have life and strength to do under double burdens. And, as if these things were not torture enough, a two-legged devilish brute, with pole, stick or whip, cutting and beating the creature's flesh into almost a jelly to fill up and make complete the diabolical combination of cruelty. These enormities should be abated at once, not only because of the cruelty to the animals, but because it is a violation of God's law, and the law of Virginia as well as of the city of Richmond; but because of the terrible example set before our rising posterity and our grown-up men and women, familiarizing them with scenes that would cause a savage to blush and sicken.

I call on all to join the Society for the Prevention of Cruelty to Animals, and thus lend a helping hand to this great end. A Register is kept at the *Dispatch* office, where all who wish can enroll their names and become members by paying one dollar annually.

GEO. WATT.

Farms and Farmers.—According to the recent report of the Commissioner of Agriculture, there are 7,000,000 persons in the United States engaged in agricultural pursuits. The total value of farms and farm implements is \$13,461,300,433, or two-thirds the productive wealth of the nation. The value of farm products and live stock for 1878 was \$2,000,000,000 against \$2,800,000,000 of mining and manufacturing products. From this it appears that a majority of the adult male population to this country is engaged in agriculture, and more than half the wealth of the nation is invested in the industry. It is a business that should receive more encouragement than it has heretofore had from our law-makers. We recommend them to cut out this paragraph and study it as they have leisure.

#### **DOES FARMING PAY?**

The Staunton Vindicator states when the war closed, George W. Freed, of Augusta county, came out of the Confederate Army with a single half dollar. He was already married. He came home and rented a little farm, which he worked on as long as daylight lasted, and often longer. His wife helped him as an industrious wife only can. Two or three years after that they moved to another rented farm, and worked hard on that. At the end of five years he had \$1,000 clear money; that is, his labor and that of his wife had cleared \$200 a year. He then bought the Ramsey farm. The first payment was to be \$1,100, and this he made up with his \$1,000 and by selling a horse for \$100. He still worked hard and met the payments as they came, and then, with his farm safe under his feet, he commenced spreading and buying additional land. To-day he raises 4,000 bushels of wheat a year, besides other grain, and to-day he is worth \$30,000. He never once thought of "going West," or even of leaving his native county. He fought it out on the line.

#### CLOSE PLANTING.

Every farmer must know, says the Farming World, that to produce the heaviest possible crop a certain number of stalks must be upon the ground. It is often observed that the great sin of American agriculture is too thin sowing. Grass is nearly always sowed too thin, and the same is true of small grain. In England they sow four or five and sometimes six bushels of oats to the acre; in this country generally not more than a bushel or a bushel and a half. Hence in England they yield three to four times as heavy as in this country; while in this country we never hear of an extraordinary crop where less than three or four bushels to the acre.were sown. Now, we venture to affirm that no very large corn crop was ever grown unless it was planted more than usually thick. In the crop of George W. Williams, of Bourbon county, Ky., the corn was planted in rows two feet apart, with a stalk every foot in the rows. This crop produced 167 bushels to the acre. But there is another advantage of close planting. The corn very soon becomes so dense that the ground is shaded, and the growth of the grass was prevented and the moisture retained in the soil. By this method of cultivation no grass is ever allowed to absorb the moisture from the earth, or to take up the nutritious gasses which ought to be appropriated exclusively to the corn.

[The foregoing clipping has been made by the Petersburg Weekly Index-Appeal. We call upon the Farming World to say whether it can verify the statement it contains? Our experience is against it, except in respect to the seeding of grass. When the World replies, we may have more to say.—Ed. S. P.

#### MISCELLANIES.

The notice in the *Industrial South*, of the *Southern Planter* and its editor, is nice and appropriate, like everything else from that paper, but I must say that the farmers did not expect anything less from Col. Knight.

Fodder corn should be planted in drills, the rows three feet apart, and thick enough to keep the stalks from growing too large, (the thickness must be regulated by the fertility of the land), as the main nourishment is in the stalk, and the stock can eat it all if small. It should be worked, as that ensures a better crop, and healthier, greener plants. It should be cut immediately after the silk and tassels appear, as it then contains more sugar, and this element of nutrition lessens as the plant proceeds to form and mature grain. Besides, the presence of nubbins in fodder corn not only involves harder stalk and less nutriment, but induces the stock to hunt for the ears and waste much feed. But the corn, when cut, in shocks of moderate size, with a band around the middle and top, draw the latter quite tight. After curing partially, the corn must be hauled to the barn and put away with dry straw, (oat straw seems to be much more acceptable to stock than wheat), layer of fodder corn and layer of straw, and packed down. This makes nice forage.

Pea vines, without a day's sun, can be cured in the same way. During January and February of this year, I fed my milch cows on forage made from fodder corn, peas, and oat straw. The difficulty of curing fodder corn is the only drawback to its cultivation. September 10th, 1881, sowed 1½ bushels of "rust proof oats, on 1¼ acres of land. The land was top dressed with manure as it accumulated in the stables during the winter, and clover and orchard grass sown, the former at the time of seeding the oats, the latter in the spring, reaped 53 bushels of fine, heavy oats, which I sold at my door for 85 cents per bushel: The stalks, a specimen of which I served, may show that more seed oats ought to have been used. The land would perhaps have yielded three barrels of corn. The lot is now covered with a heavy stand of clover and orchard grass without manure. My seed was purchased several years ago of T. W. Wood, Richmond.

June 13th, 1882, Mr. Jno. Perrin, of Hanover, told me to day, that his sweet potato hot bed furnished more sets than usual, that he had taken over 5,000 sets, from one bushel of seed, from the bed during the season. He attributed it to using cow instead of horse manure in

his bed. The manure was taken from a stall in which his cow had been confined all the winter, and fed on top fodder only and littered with fine trash. The cow was "in calf" and not milked.

Japan clover. I was in western North Carolina a few years ago, tarried a short time in Asheville and other places, and inquired about and looked at the Lespedeza Striata. Several intelligent gentlemen informed me that it would salivate cattle even in July and August. They thought it a doubtful blessing.

We live in a wheat belt, and should raise wheat, because every farmer should raise his own bread stuff, and flour and mill feed are prime necessities. We need mill feed to dilute corn meal. If the latter is used too freely alone, it will cause garget in cows, mange in hogs, and will over heat horses. We should grind our own wheat, and thus save the expense attending transportation to and from market of our flour. Before the war, my family supply of flour was made at Wm. H. Dabney's mill in King William. His brand readily sold 50 cts. higher per barrel in Richmond than the city flour. I was at the State Fair on one occasion, with Mr. Robt. Pollard, clerk of King and Queen county. He examined the premium bread, and remarked that he knew a dozen families who had better bread every day from flour made at James Robert Fleet's mill. Country people should not buy bread stuff, &c. from town, if they can be raised and prepared at home.

The recent decisions of the court against Dr. Blanton will probably involve further Legislation.

Our lands need better drainage, more lime, pea and clover fallows, and compost heaps, and only commercial manures enough to start the pea crop, when the soil is too poor to produce a fallow.

A. H. P.

#### FOR FENCE POSTS.

A writer in an exchange says: "I discovered many years ago that wood could be made to last longer than iron in the ground, but thought the process so simple that it was not well to make a stir about it. I would as soon have poplar, basswood, or ash as any other kind of timber for fence posts. I have taken out basswood posts after having been set seven years that were as sound when taken out as when first put in the ground. Time and weather seemed to have no effect on them. The posts can be prepared for less than two cents apiece. This is the recipe: Take boiled linseed oil and stir in pulverised coal to the consistency of paint. Put a coat of this over the timber, and there is not a man that will live to see it rot."—Scientific American.

#### OUR FARMERS.

The agriculturists of this section are waking up. They are getting out of the old ruts. They have learned that Tobacco is no longer King, that success can only be won by a diversity of crops. They are intelligently considering the questions connected with making money by stirring Mother Earth.

As a nucleus for investigation and a comparison of views, the South Side Farmers' Club has served a valuable purpose. The monthly discussions have led to a spirit of investigation and experimenting. Our English and Northern Settlers have evinced great interest in the new departure. In another column we print actual experiment of Captain Shaw, an intelligent retired officer of the Navy, who has tested "Silos and Ensilage." As evidence that our farmers are waking up we mention the success of Col. Gantt and associates in the Dairy business; Mr. Edward Moon made an immense crop of peanuts; Mr. C. B. Gallup has for sale nearly 400 bushels of German Millet Seed; W. Gordon Merrick, Esq., has the finest herd of Jerseys south of the Potomac. On every hand we hear of new ventures.

One word of advice to our farmers: Many of you have too much land and say you want to sell the surplus, but when a land buyer comes you run him off by asking an exhorbitant price. Land buyers are here almost every day; few buy, because the price is excessive. Stop this. If you want to sell fix a reasonable price, and sell to the first man who will give it. The great need of this country is population.

#### THE BEST GARDEN.

Peter Fay, of Southboro, Mass., tells a little incident of his early days as a farmer, illustrating the effect of frequent cultivation and the lesson of which he says was worth to him \$500 on a \$200 farm:

"The minister of the parish had the best garden in town; I went to him (the Rev. Walter Follett,) and said: 'Will you please tell me what is the secret of this enormous growth of your vegetables, and getting them so forward?' (knowing he had but a little manure, and no fertilizers then in use but little wood ashes).' 'Well, Mr. Fray, I can tell you in a few words: I am in my garden by the rising of the sun (this was June), and I can go over it in about four mornings, then I commence and go over it again, and continue it till my vegetables are grown, and never let a weed go to seed.' The secret of this growth was the frequent stirring of the soil."—Grange Bulletin.

#### FARMING.

It seems to us the future of farming has never looked so prosperous as at present. Agriculturists are realizing more freely every day the fact that theirs is the foundation rock of all prosperity, and that they are the mediums or motive power that runs and sustains all industries. Learning and acknowledging the fact is a long step towards improvement, and when they came freely to realize the necessity of education and the assistance this will give them, a marked change can be looked for in the financial and social condition of the farming community. It is not enough to know how to plough a straight furrow, or swing a scythe or cradle, there must be a general change of social life and intellectual culture, a broadening and expanding of mind, a better knowledge by reading, study and social contact; not so much living alone with the plough and the hoe handles as principal company, but seeking contact more with the world. The welfare of this country is in the hands of the farmers, if they knew it; its commercial as well as political management might be subject to their will, if they would only exercise the mind power, but in this latter (political) condition there is no more subservient class to the will of their masters—political wire pullers than they. It is the farmers votes that elect our legislators, but not their voice, for but few have the courage to study and discuss questions on their merit and without party prejudice. If they did, a different class of men would rule the country, and the agricultural interest receive more direct encouragement and attention.—Farm and Workshop.

#### THE GREAT WALL OF CHINA.

An Anterican engineer who, being engaged in the construction of a railway in China, has had unusually favorable opportunities of examining the famous Great Wall, built to obstruct the incursions of the Tartars, gives the following account of this wonderful work: The wall is 1,728 miles long, 18 feet wide, and 15 feet thick at the top. The foundation throughout is of solid granite, the remainder of compact masonry. At intervals of between two hundred and three hundred yards towers rise up twenty-five to forty feet high, and twenty-four feet in diameter. On the top of the wall, on both sides of it, are masonry parapets, to enable the defenders to pass unseen from one tower to another. The wall itself is carried from point to point in a perfectly straight line, across valleys and plains and over hills, without the slightest regard to the configuration of the ground; sometimes plunging into abysses a thousand feet deep. Brooks and rivers are bridged over by the wall, while on both banks of larger streams strong flanking towers are placed.—Scientific American.

#### THE COMING FARMER.

As civilization advances the intelligence of the farmer increases. Pass over the entire world to-day and just in proportion as farms are well cultivated, houses and gardens adorned and beautified, other things being equal, intelligence prevails, good schools are appreciated, newspapers and books abound, and refined and ennobling social enjoyments take the place of whittling, smoking, dram-drinking and gossip, at saloons on stormy days and long winter evenings. It is so in our land from east to west, from north to south. Intelligence shows in improved horses, cows, sheep, hogs, poultry-in well cultivated fields, convenient houses tastily painted, in modern or at least well kept barns and yards, in the care of manure, in attention to good seed, in securing good markets for products, without the meanness of bantering in the purchase of goods at reasonable prices, in convenience within the house, so that the greatest amount of labor can be performed with the least possible expenditure of strength whether of the family or domes-And also in a good, well kept kitchen and flower garden. fine, intelligence shows everywhere, even to the passerby. The wayfarer can tell where intelligence reigns without seeing a member of the family or entering the house. We say other things being equal. Many an intelligent farmer is fighting against odds. Circumstances. over which he had no control compel him to struggle for his bread. Every muscle has to be exerted and all his intelligence applied to the necessities of life. And yet his intelligence will crop out in many ways to make his humble abode different from the ignorant growers of one or two kinds of produce, and who know nothing more. So much we have to say for intelligence.

Education, mental strength, and vigor, pay as well on the farm as in any other department of human labor. This is beginning to be realized. The time has been when Hiram was too smart a boy to stay on the farm, he must go to school, study law, medicine or be a preacher. Joe is only fit for the farm. Keep him at it. The time is at hand, when, if we have a dull, lazy boy who can never tell a robin from a lark, that we will send him off to school to make a doctor or a lawyer, and educate the smart, active, observing boy and make him the farmer. Almost any man, by having only one idea to grapple with, can, under a good tutor, become a respectable amanuensis, copy forms, draw up deeds, and make a kind of lawyer, or be able, if he pursues the studies—mere machine work, prescribe remedies according to the books, but only the clear-headed boy, with sound judgment, quick per-

ception, firm resolve and indomitable will and industry can make anything more than a mere laborer—a hewer of wood and drawer of water for the man of brains and culture. The cream comes to the top everywhere. But there are twenty failures to secure a living off the farm where one intelligent farmer fails of a good living and of leaving something for his children.

Agricultural colleges and agricultural papers are working slowly, steadily, surely a revolution through the country. They exalt that which of all human callings most deserves exaltation—agriculture, the foundation of nature's integrity and strength. A business that calls into requisition more varied talents and qualifications than any other known among men. No human or divine knowledge is wasted when employed on the farm. If means allow and taste impels, he can make his farm the theatre of all that is grand, the centre of all that is refined; the place where the few who ascend the topmost rounds of fame in other professions will delight to resort. Such is the coming farmer. The field is open to all.—Practical Farmer.

#### PREPARATION FOR PLANTING CORN.

Editor Southern Planter:

The land for corn, if a sod or anyways stiff, should be plowed in the fall or early in winter, that it may freeze and thaw and rot the sod, making it friable and easy of cultivation, and thus killing many insects troublesome to the young corn. In April it should be cross-plowed, top dressed with good barn-yard manure, if possible; if not, some good compost or fertilizer should be applied, then thoroughly harrowed, and it is ready for the planter. Some prefer the rows checked, but I rather plant in drills from 4 to 4½ feet apart, and if high land, 2½ feet in the drill; if rich low grounds, 18 inches apart, one stalk in a hill in each case. The land should be well worked and entirely free from large clogs or lumps. You need not expect a good crop of anything without a good seed-bed; the young plants grow off much better and are easier worked after planting. The next thing, and one of the most important, is to select good seed for planting. Farmers are often too careless in this matter, taking any corn convenient to plant. We should pick our best corn early in winter, shell off a little from the tip-end, and then shell the balance for seed, and by so doing every year we can improve our crops constantly. It is a good plan to go in the field just before gathering, and select the best ears for seed, especially where there are two ears on a stalk. In this way you will soon get nearly all the stalks to bear two or more ears, and you will find it makes quite a difference in the quantity per acre to have two ears to the stalk instead of one. Do not select for seed corn with a large cob and short grain, but pick for small cobs and long grain, as a careful selection of seed and a good preparation of soil will be sure to yield a good crop with a fair season. We should confine our labor to such lands as we can improve, either by manure in the hill, or better, oroadcast, and not spend our time and labor over large surfaces of unimproved lands.

Manchester, Va.

F. Guy.

#### MIDDLESEX COUNTY.

Saluda, February 15th, 1883.

Totals,.....\$300 00 \$405 00

Messrs. Editors:—It is often said that farming does not pay. I submit the following facts and allow your readers to judge for themselves. The land upon which the following crop was make was abandoned many years since by the former owner, and it had grown up in pines. It was considered so poor, that to seed the same in wheat would be a waste of labor and seed. I determined to clean it up and seed it, keeping an account of the outlay and receipts, as follows:

20	00		
15	00		
25	00		
30	00		
5	00		
15	00		
60	00		
30	00		
35	00		
35	00		
		\$325	00
		60	00
		20	00
	30 15 25 30 5 15 60 30 35	20 00 30 00 15 00 25 00 30 00 5 00 15 00 60 00 30 00 35 00 35 00	30 00 15 00 25 00 30 00 5 00 15 00 60 00 30 00 35 00 35 00 \$325 60

Showing a net gain of \$105.00 or about 33 per cent. on the investment including the price paid for the land. This estimate does not take into account the improvement to the land, which I consider to be at least \$50. Who can beat that on poor land?

#### THE HOUSEHOLD.

Moth preventive.—A correspondent of the Furniture Gazette recommends the following remedy for exterminating moths in carpets and furniture:—After some years of experience with the troublesome pests, says the writer, I found a sure preventive of moth in pitch paper, the same as roofers use. The moth will live and grow on Cayenne pepper and tobacco, while I never could see that the use of these articles kept the moth-miller out. The plan for the furniture dealer or housewife is to cut the paper in slips and place about the room, under and behind sofus, chairs, etc.; this should be done as early as the middle of April, and in warm climates earlier. If the dealer wishes to make furniture moth-proof, he should place on the inside of backs of chairs and seats small strips of the pitch paper, and rest assured that the miller will not select these places to deposit eggs. It is the miller that is the foundation of all mischief.

LIME-JUICE IN TREATMENT OF DIPHTHERIA.—M. Czartoryski, M. D., of Stockton, California, writes as follows to the London Lancet:—

"During a prolonged residence in the interior of China, I became acquainted with the fact that the Chinese place great reliance during epidemics of diphtheria on the internal use of the fresh juice of limes, and of the fruit itself, which they consume in enormous quantities, in every conceivable form—as lemonade, with native spirits, cut in slices, etc.—during attacks of this dreadful disease, with apparently most successful results, it hardly ever failing to effect a cure. The Chinese consider it a specific, and will, in case of need, do anything to obtain a

supply.

"Since I have come back to California, as also in Louisana, I have used limes and their juices in my practice as a physician with most successful results in cases of diphtheria, even in the most desperate cases. As soon as I take charge of a case of diphtheria, I order limes to be administered as freely as possible, in any manner the patient can be prevailed upon to take them, especially in the form of hot lemonade, sweetened with white sugar or honey, or cut in slices with powdered white sugar. Besides lime-juice, (which I suppose acts by imparting an excess of oxygen to the circulation, and thereby prevents formation of vibriones, etc., and so has almost a specific effect on disease), I prescribe whatever drug may be indicated to relieve symptoms as they develop, and impart strength by appropriate stimulants and nourishment.

GAPES IN YOUNG CHICKS.—I give you preventive for gapes in young chicks.

When the hen is ready to come off nest with brood put hen and chicks in basket and hold over tobacco smoke until they seem to be drunk, say two or three minutes. The smoke can be made by putting tobacco or stems on shovel of coals.

WM. M.

[The above is from a correspondent in Halifax county, Va.

### THE INCUBATORS ON TRIAL AT HAMMONTON, N. J.

During the past month seven incubators have been on trial at Hammonton N. J., the result being a grand succes. The machines were made alike, but by different parties, with one or two exceptions, and were operated at different places. The Farmer's Magazine had its representative present to watch the experiments, and we are more than pleased with the result. The incubators were operated as follows:

No. 1 Constructed and operated by Mr. George W. Pressey; capacity, 300 eggs. No. of fertile eggs in incubator, 200, of which, 115 hatched, or  $57\frac{1}{2}$  per cent.

No. 2. Made and operated by Mr. Ezra Packard; capacity, 300 eggs. No. of fertile eggs, 244, of which, 175 hatched, or a little over 71 per cent.

No. 3. Made and operated by Mr. John Crowell; capacity, 150 eggs. No. of fertile eggs, 65, of which 60 hatched, or about 92 per cent.

No. 4. Made by Mr. Harry Little; capacity, 300 eggs. This trial was a failure, owing to mismanagement, only 15 chicks coming out.

Operated by Mr. Frederick S. Robbins; capacity, 300 eggs. No. of eggs (without regard to fertility) 250, of which 160 hatched, or 64 per cent of the gross number.

No. 6. Operated by Mr. D. B. Berry, capacity 300 eggs, hatched

114 chicks from 175 fertile eggs, or about 65 per cent. No. 7. Operated by Mr. P. H. Brown, capacity 300 eggs, was mismanaged, the heat reaching to nearly 125, ruining the eggs. It has

been started again.

These incubators were home made, and those who made and operated them had no previous experience—all of them being citizens of Hammonton. The expenses of heat (coal oil lamps) was one dollar for the 300 egg hatchers, each, and sixty cents for the 150 egg capacity. The chicks came out strong and lively, without assistance, and the loss has been trifling, not over two per cent. They are kept in homemade artificial brooders, which are as efficient as the hatchers,

We will send the specifications for making the hatcher and artificial mother to each new subscriber, and this magazine one year also for \$1.00. It will not be sent for less than \$1 to any one, and persons-who are already subscribers, must pay the full price or send a new subscriber. To those who desire to purchase an incubator we have arranged to have them supplied, 300-egg capacity for \$20, or the 150 egg capacity for \$16. This includes everything, such as lamps, thermometer, etc. Persons who buy the specifications and construct their own can do it at a much less expense, materials, exclusive of labor, costing but about \$5 for the 150-egg size, and \$8 for the 300 egg-size.—Farmer's Magazine, Westchester, Pa.

### Editorial.

#### STATE AID TO THE STATE AGRICULTURAL SOCIETY.

We find in one of our Exchanges, the Farmer's Union, a copy of the Act of the State of Minnesota, appropriating the sum of \$10,000 annually to its Agricultural Fairs, of which \$4,000 goes to the State Fair. Is not this a lesson for Virginia legislation, when it is supplemented to a greater or less degree by the example of almost every State in the Union? The Legislatures of Virginia have been too much occupied with partisan legislation, or with schemes of a public character which involve it. The lobby which works for large franchises or party purposes, overrides many of those just and simple acts which would contribute to the benefit of the masses of the people. Amongst such, we might specify a dog-law for the protection of sheep; a well-defined law of enclosures, of general application; a law regarding public roads and their construction and preservation in good order; and such bounties to Agricultural Societies which are incorporated, and thereby legally responsible for their acts, as would enable them, through a plan of association, to aid in the development of the agricultural interests of the State. As long as Virginia neglects, by proper legislation, the great interests of agriculture, she will feel the pressure of low priced lands, reduced revenue, and, worse than all, a dissatisfied people.

Some lawyers who have heretofore held seats in her legislative bodies, have thought there was a constitutional impediment in the way of aiding agriculture, and yet they have voted appropriations for objects of far less utility, and much more questionable in respect to the constitutional obligations, which should bind legislators who supported them:

We merely allude to these facts now, and express the hope that when our next Legislature assembles, it will be composed of men who will not hesitate to follow the example of the *State of Minnesota*.

Constitutional obligations are all right, and should be honestly and faithfully observed, but should not be technically construed by lawyers to defeat the fostering care of a great interest on which the life of the Commonwealth depends.

We are glad to see that the business-men of Richmond are now recognizing the importance of the State Fairs, not only to their own local interests, but to the interests of the whole State. The organized associations, such as the *Chamber of Commerce*, through its committee on *Inland Trade*, and the *Commercial Clubs*, have taken the matter in hand to secure private contributions to increase the Society's premiums and

for night entertainments during Fair-week. Already we see through the daily papers that a large sum has been subscribed, and the prospects for the next State Fair are very encouraging. The State, however, is none the more relieved from its obligations, but they are made more obligatory.

The Executive Committee of the State Society held their regular quarterly meeting in this city on the 11th and 12th of April. It was well attended—only two members, out of the full membership of sixteen, from various parts of the State, being absent. Three Ex-Presidents, as honorary and consulting members, were also in attendance. The schedule of premiums for the next Fair, liberally increased, was agreed on, and ordered to be published and distributed.

This closes the most important work for the year, so far as the officers of the Society are concerned, and it only remains for the farmers and manufacturers of the State, and of other States who may feel interested, to be present and contribute to a great exhibition.

### CATALPA FOR FENCE-POSTS.

The letter below is taken from The Banner, published and edited at Princeton, Ky., by our friend, Capt. C. T. Allen, a native of Virginia, and a brave Confederate soldier who bears the evidence on his body. Capt. Allen, who was a frequent visitor from the lines to our home at Wilton, on James river, will remember two large catalpas which stood on the river front of the house. These trees were, doubtless, planted when the place was settled in early colonial times, for at the period of the late war they had a diameter of three feet, and for many years their growth had been apparently slow. We remember that a gallant Colonel of a Louisiana regiment, stationed some five miles away, called to see the old homestead, where, about forty years before, as a child, he had spent pleasant days and months with relatives. He had mounted his horse to return to his camp, when suddenly he remembered the catalpas, and asked if they were still standing; and, on going to see them, he said they appeared but little larger than when he played under their shade in his boyhood. Loaded with clusters of pink blossoms in the month of May, no trees can present a more beautiful appearance. The seeds are formed in long pods, are numerous, and we should suppose would afford an easy means of propagation. The production from cuttings we know nothing of, but have no reason to doubt its efficiency. In clearing up the lands of the farm a catalpa tree of small size was

frequently found—grown up, no doubt, by the dropping of the seeds by birds. These were saved and used for fence-posts, and no wood can be better for this purpose. The sap on the large trees we have mentioned is not more than an inch in thickness. The interior wood is solid heart, and almost as hard as iron, and as to duration it may be better, for iron will rust out, when the catalpa will hardly ever rot out.

We are glad to see that attention is being given to the propagation of these trees for fence-posts.

CHARLESTON, Mo., March 23.

C. T. Allen, Esq. :

Your letter to Mr. Danforth, of this city, has been handed to me for reply, and I will say that I have 100 acres in catalpas, five years old, 6 by 4 feet apart. They are from 6 to 12 feet high, and from 1 to 3 inches in diameter. At ten years of age these trees will make three posts each, and the posts will last forever. I know catalpa posts in this county seventy years old. I have myself three miles of fencing; all the posts are catalpa, fifteen years old, and last year I had to move a portion of the fencing and found the posts as sound as they were the day they were put in the ground. I plant cuttings or limbs about eight inches long cut from the older trees, and put them about four inches in the ground. I can furnish any number of cuttings at \$3 per thousand. This is the month to plant out the cuttings.

Yours respectfully,

H. J. DEAL.

### DOES SORGHUM REQUIRE A SPECIFIC MANURE?

Editor of Southern Planter:

In your editorial, in reply to my enquiry for a specific manure for sorgo, you say that my idea is news to you, that sorgo needs a specific manure, or that the quality of the sorgo is affected by the kind of manure that is used. I agree with you, that sorgo is like the hog, and it is not particular as to what supplies its appetite, but for that very reason I take it, that we ought to be the more particular what kind of manure we place within its reach.

Now, if you will bear with me a little, I will give you my experience as a grower and manufacturer of sorgo, embracing a period of about eight years, working into sorgo each year the cane that grew upon

from ten to forty acres of land.

In 1878 I planted a lot in sorgo and took dirt from under an old house that had been standing about thirty years, dropped one single handfull of dirt in each and every hill—hills three feet each way. The cane came on fine, large rich stalks. I worked the cane into syrup myself; but to my surprise the syrup was untit for use, having a salty, nasty, taste. Evidently it had fed largely on the saltpetre and the general filth that was under the old house—hog like.

Then again, I planted a lot in sorgo, on which cows had been pen-

ned, until it was very rich; the cane grew wonderful, made a yield of about three hundred gallons per acre, but as the syrup was cooking on the pan (Cook's Evaporator) the bystanders could actually smell the

cow-dung in the whole mass.

And again, I planted a very rich piece of bottom land in sorgo: the land some years before and for several years was an old pond, but had been drained and cultivated in corn. It produced large crops of corn. I concluded to try it in sorgo. The sorgo grew to an unusual size, ripened up fine and in good time; was cut at as near the right time as I knew how, but to my great surprise when we passed the cane through the mill (a heavy four horse Victor mill) we got but little juice, and as the juice passed over the evaporator we got but little syrup. This juice when tested with a French glass saccharometer marked only a degree or so richer than soft water which you know makes zero. Now, while the hog was on this lot making cane he found plenty to supply his appetite, but as soon as you put him to making sorgo he gets down to the starving point.

Hence my enquiry after a specific fertilizer for the sorgo crop, as it takes but a few crops to completely exhaust land on which it grows; of its properties to produce a syrup an observation has shown me that "just any thing" will not do as a manure for the sorgo crop. Sorghum has such power of assimilation, that it ever partakes of the color of the soil on which it grows, besides partaking of the quality or flavor

of the manure on which it feeds.

Respectfully,

Cana, N. C., March 15, 1883.

THOS. F. EATON.

Our correspondent has stated a case of interest and novelty. His three specifications of facts are sufficient to arrest the attention of all who are in any way interested in the cultivation of sorghum. Com. Loring, with the appliances at his command, or Col. Colman of the St. Louis Rural World, may be able to say, or at least find out, whether special manures are demanded for sorghum to prevent the pollution of its syrup in the manner in which our correspondent has alleged.

In our brief note to the same correspondent's enquiries in the *Planter* for March we indicated a doubt as to the correctness of his conclusion, that sorghum required special fertilizers, or that the usual farm manures were unfit for it. It is a grass feeder, and for the want of a better illustration, we likened it unto the hog, whose animal organism enables it to assimilate its food, however coarse, and still remain the leader as the flesh-food of America, and, to a great extent, of the world. With this simple illustration we passed over the subject, and had no idea our friend would reply with the important facts he has presented. They deserve enquiry, and the attention of all who plant sorghum should be directed to them, and reports made. For ourselves, we appeal to all our readers to do so, who may have the smallest or the

largest sort of sorghum plantings. The information obtained will be diffused, and prove advantageous to what may become, if not so now, a great and profitable industry.

We have been put to thinking by Mr. Eaton's letter, and have conjured up many pros and cons why he may, or may not, be correct in his observations. Let us say negatively:

- 1. That our leading staple—corn—is a gross feeder, like sorghum, and is usually, or, at least often, manured with the most concentrated of farm manures; and yet, who has ever said that the flavor of its grain or fodder, was ever affected thereby? And so with wheat and other grains.
- 2. Vegetables are never so affected. The potato, in drill-culture, is in direct contact with the manure, and yet no flavor is imparted.
- 3. Take the case of turnips, which is somewhat appropriate, from the fact that the statement is, that sorghum grown on ground on which cows have been penned is worthless, as a flavor is imparted to the syrup to a very offensive degree. The old Virginia turnip-patch, and we may say of North Carolina also, from the earliest settlement of the country, and not now out of fashion, is located on a rich and freshly cow-penned spot, and yet no obnoxious flavor is given to the turnip.

Many other similar cases might be stated; but, per contra.

- 1. Whilst we can call to mind nothing in the vegetable kingdom—sorghum possibly excepted—which is affected in taste by the manure which contributes to growth and fruitage, yet with birds and animals there are marked cases in which food flavors the flesh. The wild-duck is fishy at seasons when its principal food is fish; and when it feeds on the seeds of the wild celery its flesh is particularly tainted. So, in a less degree, with domestic fowls, which have a range which allows them to pick up worms and offal matter, their flesh is slightly tainted, and the process of cooping and grain feeding is deemed necessary for purification.
- 2. A cow which is allowed to graze where wild-onions are abundant has her milk so impregnated with the taste as to make it unfit for use, and the taste extends to the butter in an equal degree. This may be accounted for by the fact that the milk secretions are confined to a few hours, and thus depend on the food taken in the stomach, whilst the flesh of the animal may not be at all affected.

In the case of sorghum, its matured seeds, like those of corn, wheat, &c., may be free from all taint; but its sap, or vegetable blood, may be infected by what the roots have taken up before the powers of selection and appropriation have culminated in the full maturity of the plant.

Until the question is settled, we would advise our correspondent to plant his sorghum on a grass fallow, without the application of farm manures, and to assist the land, if necessary, with acid phosphates, finely ground bone, or phosphatic-rocks similarly ground. The prepared manures, such as we advertise:—So. Fertilizing Company's, Allison and Addison's, Franklin Stearn's, the Stono and Ashly Companies', of Charleston, S. C., and Orchilla Guano, are all rich in the phosphates and will answer the purpose without trouble to the farmer. The question of the cost to the purchaser of separate materials and their use, is only to be considered.

Since the foregoing was written, we have reread Mr. Eaton's MS., and his last paragraph induces us to think he has mistaken the meaning of the word assimilation. Webster defines it thus: "to turn to its own substance by digestion: hence, animals or vegetables may assimilate their nourishment." Or, in other words, they can reject in process of growth the effects of all food which is not necessary to their proper development and natural purity.

#### ORIGIN OF THE CEREAL GRAINS.

Wheat ranks by origin as a degenerate and degraded lily. Such in brief is the proposition which this paper sets out to prove, and which the whole course of evolutionary botany tends every day more and more fully to confirm. By thus from the very outset placing clearly before our eyes the goal of our argument, we shall be able the better to understand as we go whither each item of the cumulative evidence is really tending. We must endeavor to start with the simplest forms of the great group of plants to which the cereals and the other grasses belong, and we must try to see by what steps this primitive type gave birth, first to the brilliantly colored lilies, next to the degraded rushes and sedges, and then to the still more degenerate grasses, from one or other of whose richer grains man has finally developed his wheat, his rice, his millet, and his barley. We shall thus trace throughout the pedigree of wheat from the time when its ancestors first diverged from the common stock of the lillies and the water-plantians, to the time when savage man found it growing wild among the untilled plains of prehistoric Asia, and took it under his special protection in the little garden-plots around his wattled hut, whence it has gradually altered under his constant selection into the golden grain that now covers half the lowland tilth of Europe and America. There is no page in botanical history more full of genuine romance than this; and there is no page in which the evidence is clearer or more convincing for those who will take the easy trouble to read it aright.—From "The Pedigree of Wheat," by Professor Grant Allen, in Popular Science Monthly for March.

### The Southern Planter.

SUBSCRIPTION; \$1.25 a year in advance, or \$1.50 if not paid in advance.

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#### COLUMN RATES.

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Special rates for cover.

Reading notices, 25 cents per line, of brevier type.

#### EDITORIAL NOTES.

#### TO OUR SUBSCRIBERS.

As stated in our last issue, bills are placed in this for all unpaid subscriptions, and we hope our readers will give them proper attention. A subscriber should ask himself the question, whether it is right to receive and read a paper which is not paid for according to the terms of publication? Some, who may be behind, may say, "Stop sending me your paper," but this does not square the account. According to the rules of journalism and the law of the country, a subscriber can only order a discontinuance of a paper after his arrearages are paid up. Many of the best papers of the country adopt the rigid rule of stopping all papers at the end of the time for which payment has been made; and this may be best for both publishers and subscribers, as thus no open accounts have to be kept. Planter, and other publications, have adopted a more liberal plan, which awaits the order for a discontinuance. For ourselves we say, that some of our best friends and patrons overlook their payments for 20

several months, and some for one or more years, and yet they pay; and some of them might be offended if their papers were stopped for non-payment at a date which they have overlooked. As to the few who may be willing to receive and not give in return, our difficulty lies in knowing exactly who they are, and if this trouble were removed we would be able to steer clear of the reefs they impose. In a large majority of cases the smallness of a subscription for a paper which is regularly received and read, causes it to be overlooked; and the fact is forgotten that these small sums, in the aggregate, pay the expenses of a publication in respect to printing, paper consumed, rent, postage, and the personal living of the publishers. The Pranter has no trouble in sustaining itself by its patrons who do pay, but if it could get all its dues it might ta'k of profits which would not put to shame those of other enterprises, but which would be equally legitimate.

On the whole, our expectation is, that subscribers who get bills in this issue will make their remittances, and thus settle the matter on both sides, and be ready for a fresh start.

THE COLONEL is dead. This celebrand imported Percheron Norman horse, the property of Mr. S. W. Ficklin, of Albemarle county, is really by death a loss to the State. The graphic obituaries which we have seen in the *Industrial South* and *Charlottesville Chronicle* do him but simple justice.

Health is Wealth.—"All the health I enjoy, and even my life, I may say, is in consequence of Simmons Liver Regulator. I would not take \$1,000,000 for my interest in that medecine."

"W. H. WILSON, Welborn, Fla."

Every Lady should send 25 cents to Strawbridge & Clothier, Philadelphia, and receive their Fashion Quarterly for six months. One thousand illustrations, and four pages new music each issue.

"Rough on Corns." 15c. Quick, complete, permanent cure. Corns, warts, bunnions.

FEARLESS THRESHING MACHINES are advertised in this issue of the Planter. The cut indicates that they are combined separators and cleaners, and are propelled by rail-way power. They would, therefore, seem to be adapted to the wants of small farmers whose crops will not justify the use of steam or heavy and expensive lever power. The rail-way power has been much improved of late years, and there is no constraint on the muscular action of the one or two horses used on it, and no draft is required, weight being the propelling force. The makers of these machines claim to have taken many premiums at State and International Fairs.

Address Minard Harder, Cobleskill, N. Y.

THE advertisement of Mr. Benedict should attract attention. The hydro-carbon process of generating heat we have had occasion before to speak of in the columns of the Planter. It is simple and wonderful in efficiency. The process patented by Carter is controlled by that well known Virginian, E. G. Booth, for the United States, but with his well-known devotion to his native State, he desires, first, to confer on its people the advantages which may be realized from its use. Mr. Booth was also the part owner of another patented process. known as the Holland Retort, but he prefers the Carter, and as far as we can judge, it is the best. We may be able hereafter to say why.

Mr. Booth is arranging to organize a chartered company to bring this process

into general use.

The Scientific American is regularly received, and read with interest, because we have rather a mechanical turn of mind. We can occasionally get from it clippings which bear on practical agriculture, or mechanical inventions for the farm, and these we quickly appropriate. It stands ahead of all other journals of its character.

FOR THE CHILDREN.—Let the children take Simmons Liver Regulator and keep well. It is purely vegetable, and safe to take either alone or in connection with other medicine. Mild in acting and pleasant to take.

WE again call attention to the advertisement of J. E. Doherty, merchant tailor. Gentlemen in the country who wish to dress nicely and have clothing that will wear well, should write to, or call on Mr. Doherty, and they will be suited in quality and price. We know what we say, because our clothing has been made by him for fifteen years, and have never had occasion to complain of a misfit, and if we have complaint at all, it is that his clothing wears until there is a change in style.

ATTENTION is invited to A. T. Burr's advertisement of carriages, buggies, wagons, &c. Mr. Burr has been long in this trade, and understands his business. We bought vehicles of him twenty five years ago, when he was associated with the house of Hooker & Osborn, who kept a fine establishment nearly opposite the postoffice, in a house which was burned on the night of the evacuation of the city by the Confederate Government.

THE INDUSTRIAL SOUTH is edited in the same room with the Planter, and both papers work with good spirit for the industrial interests of the State and the whole country. Gen. McDonald and Major Baker P. Lee, the editors of the South, are both experienced journalists-ante and post bellum-and are gentlemen of high culture who know well the work they have in band. Their paper has made a wonderful impression on the country in the period of existence of about two years. In this short time it has done more to weaken the animosities of sections, to invite immigration, and the investment of capital in Virginia and other Southern States than any other publication we know of. It is fast gaining the confidence and support of well thinking people, North and South, and we predict for it a bright future.

Weekly, and \$2.00 per annum; or, combined with the *Planter*, both publications may be had for \$2.60.

FLIES AND BUGS.—Flies, roaches, ants, bed-bugs, rats, mice, gophers, chipmunks, cleared out by "Rough on Rats." 15c.

THE TROPICAL AGRICULTURIST, monthly, published at Colombo, Ceylon.

We have received, as we go to press a copy of this Journal, with a personal letter-from its publishers asking an exchange with the *Planter*. We cheerfully agree to an exchange, because our readers, and other people of the United States, are large consumers of the products of this far off clime.

Its coffee, tea, palms, chinchona, and spices are to be found in all our households, and we cannot be indifferent to the methods of production. We may learn something of these Eastern farmers, and they may learn something of us.

For the present we note:

First, an extract made by this paper from the London Globe: "Adulteration in the United States; Bad as we are in the matter of adulteration in England, things are certainly worse in the United States, according to a report just presented by a committee on the subject to Congress. For example; black pepper has been so effectually sophisticated that the trade appears to have lost all knowledge of the genuine article. For tea. Uncle Sam drinks black-lead, indigo, Prussian blue, chromo yellow, Venetian red, corbonate of copper, and arsenic of copper. cup will hardly cheer the drinker who knows its composition."

Second: From the Report of the Director of the Royal Botanic Gardens, at Pérádeniya. "Sugar Sorghum! For a stock of seed, of fourteen varieties, we are indebted to the U. S. Agricultural Department. This, being cultivated on a large scale in the States for syrup and sugar, has been the subject of some admirable chemical reports. My object, in its experimental culture here, was rather to prove its value as a cattle-fodder, which is certainly great. The largest and most leafy varieties afforded are abundant, sweet, and succulent, food much appreciated by the garden bullocks. The plant, of course, is an annual. It affords also a very good grain, suitable for the best districts of Ceylon."

GORGED LIVERS AND GALL,—Billiousness, headache, dyspepsia, constipation, cured by "Wells' May Apple Pills." 10 and 25c. THE LADIES FLORAL CABINET,—has been received, and is as beautiful and lively as this spring month. We have noticed this publication in several of our former issues and can commend it as one of the most interesting of its kind.

We club with it at \$2.00 per annum—sending it and the *Planter* at this price.

ARTIFICIAL INCUBATION.—Noticing the inquiry of J. H. D, I herewith give my experience of this season. From 78 eggs placed in an incubator at one time, I hatched on the 8th of March 71 chicks. The following was the temperature kept up: The first week. 100°; second week, 102°; last week, 104°. I did not let the mercury at any time get below 92°, and then regulated gradually up. I kept up a moisture by sprinkling thoroughly once a day with water rather above blood heat, with a whisk-broom. I turned the eggs twice a day, and kept it up till signs of hatching. I made it a point to be regular in hours of sprinkling and turning. At this time I have my incubator filled with 234 eggs.—G. L. B., in C untry Centleman.

#### Fearless Threshing Machine.

We call the attention of farmers and threshermen to the advertisement of the celebrated Fearless Threshing Machine, elsewhere in this paper. Unparalleled he nors have been bestowed upon this machine, at fairs and exhibitions, State, National and International; and, if universal victory at trials is evidence of superiority, then most assuredly was an ex-President of the New York State Agricultural Society correct, in saying of the Harder Machines, "they are the best ever made." And, as equally good and reliable testimony has been borne times without number, persons designing to purchase will do well to consult the manufacturer of the Fearless, Minard Harder, Cobleskill, N.Y.

#### MAGAZINES RECEIVED.

The Popular Science Monthly, published by Appleton & Co., of New York, always furnishes interesting and instructive reading to men of culture. The number for April presents a rare table of contents. We cannot trust ourself to speak of its merits; for there is not an article in it which is not worthy of special notice. "The progress of the backboned family," by Miss A. B. Buckley, is beautifully illustrated, and furnishes a fund of information, rare and interesting, in respect to vertebrate animals and reptiles.

"How to Build a House," by the Co-

operative Building Plan Association, of New York, is a finely illustrated book, with plans and specifications of farm dwellings and other buildings. Price, 50 cents; by mail, post paid.

Popular Science Monthly's Index to all its volumes for twenty years, furnishes a method of easy reference to the subjects which have been written on in this publication. It is valuable to a writer who may be investigating any special subject, for he will be sure to find something here that will aid him.

The Harpers—Monthly, Weekly, Young People and Bazaar—have come again. They are rich tributes to the culture and tastes of the people.

The Century and St. Nicholas are again with us, and as bright and interesting as ever.

#### REPORTS.

Third Annual Report of the Hon. A. P. Butler, Commissioner of Agriculture for the State of South Carolina. This is an intensely interesting publication of 225 pages, which is of value to every farmer in the whole country. We expect to make extracts from it in the future, by which our readers will be able to appreciate the great advantages of a well-regulated Bureau of Agriculture in every State. One of the most interesting papers it contains, is a letter from Dr. Frost, State Chemist, on the subject of Floats, or finely ground phosphatic rock. This article concludes as follows: "For prompt and outspoken results, use acid phosphate. For slow but sure and continued results, use ground For a combination of the phosphate. above two, with the added virtues of potash, lime, magnesia, soda, &c., use ashelement as at present compounded. And for the most complete and crowning results to the land and to the crops, use, in connection with the ash-element, green crops (peas and vetch pre-eminently best for the Southern States) and cotton seed. All is practice; not theory, except as verified by practice."

Report of the Distribution and Consumption of corn and wheat, and the rates of transportation of farm products, from the United States Department of Agriculture.

The Cornell University Register for '82 and '83, Ithaca, New York. This is a valuable epitome of the course of instruction, &c., at this well known institution.

Report of the North Carolina Agricultural Experiment Station for 1883 to March 1.

Report of same on Kainit, or German Potash Salts.

Report upon the number and values of farm animals, of the product and quality of cotton, and comparative values of American and European farm implements, from the United States Department of Agriculture.

Report on The Grange, its origin, progress and educational purposes, by the Hon. D. Wyatt Aiken, of South Carolina, from the United States Department of Agriculture.

Report of the annual meeting of the Holstein Breeders Association of America, held at Syracuse, New York, March 21, 1883.

This is an interesting report in respect to this breed of cattle, which, as yet, is but little known in Virginia.

We understand it is the favorite breed of the Hon. Wm. Fullerton, who has introduced them on his farm in Fairfax county, and we would be glad for Judge Fullerton to tell the people something of them through the columns of the *Planter*.

#### CATALOGUES.

Agricultural implements, by the Belcher and Taylor Agricultural Tool Company, Chicopee Falls, Mass.

The numerous illustrations indicate a great variety, many novel implements of value, and prices appear to be cheap.

Annual Catalogue of select plants and seeds from Paul Butz & Sons, of New Castle, Pa. This is one of the most beautiful and elaborately illustrated we have received, and embraces flower, vegetable, and

lawn grass seeds, plants, shrubs, and small fruits of all kinds.

Jersey Cattle, embracing the Crystsl Spring Herd. Address J. H. Walker, Worcester, Mass.

J. H. Bell, Harrisonburg, Va., sends us his beautiful little catalogue of flowers, small fruits, plants, &c.

Mr. Bell's advertisement appeared in the March number of the Planter, and we were g'ad to see this evidence of taste and culture in the Valley where we thought grain, hay, and cattle were absorbing the thoughts of the people; but it shows what influences ladies can bring to bear on the sterner tastes of men

The American Fruit Drier or Pneumatic Evaporator.

Thomas Smoothing Harrow and perfected pulverizer.

Last but not least, the descriptive catalogue and price list for 1883 of Jersey Red Swine, bred and for sale by Thomas Lovelock, Gordonsville, Va. Mr. Lovelock we know to be a careful and reliable breeder.

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The only machine that received an award on both lorse-power and Thresher and Cleaner, at the Centen-The Only machine that received an award on both Horse-power and 'Ihresher and Cleaner, at the Centennial Exhibition, was awarded the two last Cold Medalls given by the New York State Agricultural Society on Horse-powers and Threshers, and is the Only Thresher selected from the vast number built in the United States, for illustration and description in "Appleton's Cyclopedia of Applied Mechanics," recently published, thus adopting it as the standard and machine of this country. Catalogue sent tree. Address Verschung Language Chalettill Schopurge Co. No. MINARD HARDER, Cobleskill, Schoharie Co., N.Y.

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of this most useful invention in daily operation, generating steam for a 20-horse power steam engine. As the Hydro-Carbon Retort requires no draught, no smoke-stack, grate-bars or ash pit, consequently no sparks, cinders, smoke or dirt result from it. Perfect safety from fire places the Hydro-Cabon Gas far in advance of any other fuel for domestic or manufacturing purposes. The great variety of small industries to which motive power can be advantageously applied demands an economical and pergeously applied demands an economical and perindustries to which motive power can be advanta-geously applied demands an economical and per-fectly safe and clean fuel. This we claim for our Hydro-Caibon Gas Retort. We are compelled to make use of fire and steam, notwithstanding the great risk and dangers that are connected with its use; we cannot avoid it; go where we will, we must live and move by it, constantly exposed to the de-structive and unlimited power it develops when un-loosed, and uncontrolled by the use of Hydro-Carbon Gas produced. By this nateral Retort perfect safety Gas produced. By this patent Retort, perfect safety is guaranteed, as the fire can be extinguished in an instant by simply turning the handle of a spigot.

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The Rock is subjected to FREQUENT ANALYSIS by the Company's Chemist, and is of the BEST QUALITY.

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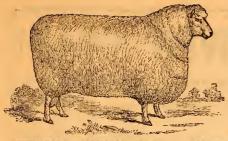
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Very respectfully,

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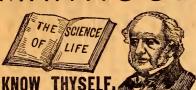
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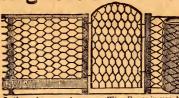
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orchilla Guano has been used for corn quite extensively in Maryland and Pennsylvania for several years past with the best results, and also, to a limited extent, in some portions of Virginia during the last year very successfully, and we offer it again this year, feeling fully satisfied that a trial is all that is needed to convince the most skeptical that it is not only the cheapest but the best Fertilizer in the market.

#### THE CHEMISTS ENDORSE IT:

The Department of Agriculture of the State of Virginia, under the administration of Dr. J. M. Blanton, have recently undertaken the analysis of every brand of Fertilizer, sold in the State. The Report of the work done in that respect, by Prof. W. I. Gascovne, the well known Chemist of the Department, during the Fall Season of 1882, has just been published. It embraces the analysis of seventy-five different brands of Fertilizers, and certifies to the actual value of their several constituents as developed by the analysis. A reference to this Report exhibits the following remarkable results:

1. The actual value of most of these Fertilizers falls below the prices asked for them !
2. Where the actual value exceeds the price asked, the excess, in very few instances,

reaches 10 per cent.

3. In the case of ORCHILLA GUANO, the certificate of the chemist is "Actual value \$41.12," which is more than 50 per cent. over the price asked for it!

This official statement is only corroborative of similar results, furnished us privately by other chemists of high reputation in Virginia and elsewhere; notably Prof. Mallet, Dr. Dabney, Prof. Taylor and others. According to Dr. Dabney, the cash value of the sample analyzed by him, was \$43.97. Prof. Taylor's, by the same calculation, was

We are permitted to copy a portion of a private letter from PROF. JOHN R. PAGE of the University of Virginia, as to practical results:

University of Virginia, January 23, 1883.

\* \* \* \* \* I have used Orchilla Guano very successfully on root crops, as you might expect from its high percentage of Phosphoric Acid. \* \* \* I repeat what I have said repeatedly, that high-priced ammoniated fertilizers cannot be used in a large majority of the worn-out lands in Virginia profitably, until those lands have been prepared by drainage, thorough tillage-the use of lime compounds and vegetable matter ploughed into the soil. Until the land is prepared thus, there is nothing to hold the nitric acid and ammonia in the soil, and it is carried off by the drainage and atmosphere before the crop can use it, which often results in no profit and no permanent improvement to the land. I have used the Orchilla Guano this fall on wheat. \* \* \*

Yours, &c.,

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