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ESTABLISHED 1842.

Prof. Riley is of the opinion that Kansas and Missouri will be exempt from the grasshopper scourge in 1876.

J. B. Laures writes from Rothamstead to the Scientific Farmer, that so little interest is taken in his experiments that he has almost ceased to publish them.

Mr. W. G. Baldwin of Ticonderoga, N. Y., has sold his 15-year-old Lambert mare, Alice, to California parties for $7000. Alice has trotted on the ice in 2.16 and 2.20.

Dr. Edward S. Smith, V. S., 37 Park Pow, New York, sends us his card and circular soliciting business. He has resigned the position of veterinary editor of Turf, Field and Farm, to give his entire attention to veterinary practice. We have no knowledge of Dr. Smith beyond what is given in his circular. It is to be said to his credit that he makes no claim to successful treatment of incurable diseases.

To P. M. Springer, Esq., Springfield, Ill., assistant secretary of the American Berkshire swine association, we are indebted for a copy of the $100 premium essay, by Hon. A. B. Allen, on the Origin, Management and Breeding of Berkshire Swine, a neat pamphlet of 24 pages, containing practical suggestions drawn from the large experience of the author as a breeder of swine, and of value to every farmer who keeps swine of any breed. It can be procured for 25 cents, by addressing Mr. Springer or A. M. Garland, secretary, Springfield, Ill. The association has issued the first volume of a record of Berkshire Pedigrees, which we have not seen.

Dr. Sturtevant says in the Scientific Farmer that plants need the repose afforded by winter for the ripening of their tissues, and also rest during the night. "In damp, muggy nights some out-door plants growing all night, become evidently weaker and, unfit to ripen their fruit in the quantity and of the quality which would be expected of other plants whose night growth has been delayed. The element of time is an important one in nature, and if nature's operations are too much hurried, there is a weakness somewhere apt to crop out." We have always heard old farmers say that they liked nights so warm that the corn would grow all night. The doctor continues: "There is a certain opposition between the vegetation and reproductive organs—and a check to the one may be productive of an effect upon the other. In root pruning we afford a check to the vegetative processes of the plant; time is given for a more complete ripening of the tissues, and maturation of the juices, and when, through the replacement of the roots, a renewed and more active growth takes place, it will be found, we think, that the check which the plant has received has served to change the forces of vegetative growth into forces of vegetative fruitfulness. Our claims, founded on common experience, and on our own experiments, are two-fold; as our readers will have perceived. 1. That the root pruning of some annual plants tends to give them increased power over a given area of soil; for an increased soil occupancy necessarily implies increased opportunities of collecting food. 2. That the check produced by judicious root pruning changes vegetative forces into crop producing forces to a greater or lesser extent, as determined by accompanying circumstances. We shall hope to verify our claims by our actual farm practice of the present year, and we trust others will also experiment, and satisfy themselves of the truth or falsity of our views."

The Stockbridge Fertilizer.

There is an apparent disposition in some quarters to sneer at the Stockbridge fertilizers and fling innuendoes at Prof. S. as a speculator upon the farmers.

We are not prepared to say that fertilizers prepared under Prof. Stockbridge's formula are of sufficient value to warrant farmers in buying them and paying freight on them. It must be evident that farmers who suffer a portion of the farm yard manure to be wasted, must first take measures to utilize the whole of it, or they will never make their farms fertile or profitable by the use of commercial fertilizers. But the farmer who finds, after saving and using all of the domestic fertilizers, that he still needs more to help in the restoration of worn-out fields, will find it safe to test a fertilizer so well recommended as Stockbridge's.

The high character of Prof. Stockbridge is assurance enough that he is actuated by an honest desire to promote the good of agriculture. That he may be over-sanguine is possible. The record of experiments by a great number of disinterested farmers carries a very strong presumption that there is solid basis for belief in the economical value of the chemicals prepared under these formulas. Farmers have been cheated so frequently in commercial fertilizers that they have grown suspicious.

We have such confidence in this new departure in fertilizing crops, and such a desire to know its agricultural value, that we bought enough of the chemicals for an acre of corn, and have planted that acre with no other fertilizer except plaster in the hill, by the side of corn on barn-yard manure.

A subscriber at Landgrove wants a remedy for closed-up teats. He says:

"C. W. Jenkins has a cow that came in May 3. For the first four or five days he could get but a very small stream of milk out of the two hind teats, then they closed up entirely. He used a knitting needle, but could not get a stream except by the use of quills. After the quill was inserted the milk would flow freely. The milk seems to be all right and the bag and teats seem to be all right except at the end of the teat. There is no lumps or bunches, no inflammation or swelling. Will some reader of the VERMONT FARMER give him the cause and a remedy."

An editor who received a letter in which weather was spelt "wethur," says it was the worst spell of weather he had ever seen.

Cows at Pasture.

We have all noticed within the last two or three weeks the intense satisfaction which the cows have manifested on their return to the summer pasturage. The confinement of winter must have been irksome enough to them, judging by the froliesome antics they played when they were allowed a run on the green grass. This confinement is one of the incidents of our high northern latitude and the cold of our long winters.

One thing will be noticed by every one of careful observation, and that is that cows that have been well wintered, properly housed and regularly and liberally fed, will do better at pasture this summer than such as have been neglected and half fed, as we often see them. There are farmers who undertake to keep cows, and neither feed them well nor house them well. To such it makes but little difference whether they have Ayrshires or Alderneys, natives or grades; they will have a lot of poor cows, let them come from what stock they may. A man that keeps more cows than he can feed, who has a dirty and ill-ventilated stable will not only have sickly cows, but his milk will be rank and strong, his butter bad, and his cheese worse. Dirt, except when scattered on a man's pastures, never produced a farthing to a farmer. There is no economy in dirt. The good farmer keeps no more cows than he can feed well. If you go about the state, you will find poor cows and poor farmers. But the poor farmer is altogether the poorer of the two. A poor farmer will make a good cow into a poor one, almost by a miracle; while, on the other hand, a good farmer will make a very fair cow from a poor one, or fat her at once for the shambles. If poor farmers could be disposed of in some summary way, it would be a blessing to the country and a day of jubilee to the cows.

A man that will starve or abuse such a mild, beautiful, forbearing animal as a cow, is fit only for the loneliness of the desert. Even when she is kicked and sworn at and half fed, and, when maternal affection is most strong, we take from her her first born, that she would like to lick and ramble about the green pastures with, so that we may make money from her yield of milk, she still turns up her mild eye in calm resignation, and goes uncomplaining to her poor and slovenly shelter, without a murmur or a look of reproach. What human beast would submit uncomplainingly to such a fate?

We always rejoice when the time comes to let cows out into the pasture. It is less trouble to take care of them, and as a general rule they do better on grass, which seems to be their natural feed than on dry hay. Besides we like to see them apparently enjoying themselves as they do. We do not prize and appreciate the cow half enough. She is one of the best gifts to the human family. The flowing pail of pure milk, in which are dainties supplied for the sick and food for the poor, which is both healthy and delicious; rich cream, excellent cheese and the rolls of golden butter are a few of these dainties of which we should not be willing to be deprived. Her products are carried wherever civilized man goes. How surely she pays for every blade of grass, lock of hay and kernel of corn with her daily contributions; and all she asks in return is enough to eat and drink, and that to be given in good quality. In eastern lands, the good "shepherds watch their flocks by night," and remain with them during the day, seeking for the most fertile spots. Joseph's brethren went to Dothan for better pastures, for Jacob had much cattle. We cannot migrate and take our flocks and herds from place to place as they used to do in old times, nor is it desirable that we should. But we can do what is better, and that is improve our pastures and increase their summer feed and so save them long journeys. Our system is better than that of the ancients, and the cost of renovating our old pastures is no greater than the cost and wear and tear of frequent migrations to find new feed.—*Massachusetts Ploughman.*

Fodder Corn for the Dairy.

Fodder corn can be put in as late as the 20th of June and even up to July. Late crops make excellent fall feed for dairy stock when grass begins to fail and deteriorate on account of frost. It is a great saving to the hay crop, and many dairymen are enabled to carry stock along until the middle of January without feeding hay, sole reliance being placed on corn fodder which is properly cured and shocked in the field, whence it is used from week to week, as wanted.

In raising corn fodder, good, rich, mellow soil is required. There is no crop that will bear manuring better than corn; but in late sowings well-decomposed manures, well-incorporated in the soil, are best, unless the weather happens to be moist, as fresh barnyard manures are liable to become dry and of little use.

We have grown good crops of corn fodder on sod in old meadows, the crop of grass being taken off in June, the land immediately plowed and sowed with corn. And in seasons when there has been a light hay crop we have known many dairymen to resort to this method to obtain the requisite amount of fodder for carrying their stock through the winter. The best way to grow this crop is to drill in the seed, and if large drills are not at hand, it will be found more advantageous to use small ones rather than to sow broadcast. We like the rows to be at least twenty inches to two feet apart, as it allows the air and light to be properly distributed through the plants, while the wide space will admit of horse-hoeing, which will add to the growth and value of the crop.

From two to four bushels of seed are used; the latter quantity when sown broadcast; but we prefer not to have the stalks grow too thickly together, as by excluding the sunlight the stalks are apt to be weak, liable to be prostrated by winds, and are apt to be less nutritious than when the seed is not so thickly sown.

Much has been said, first and last, concerning the value of corn fodder for the production of milk, and some have urged that it is of little or no account. This latter opinion, if it does not originate from prejudice, must have come from the manner in which the crop is grown—by being sown too thickly, thereby obtaining plants that could not properly mature, and in consequence lacking the nutritive elements of a well-grown crop.

We have used fodder corn for many years in our own dairy, and always with the best results. It promotes a flow of milk and keeps up the supply at a time when it would be difficult to obtain any other crop to take its place for this purpose. And it produces a milk of good quality, as we have repeatedly demonstrated by resorting to the proper analysis of different samples. We urge, therefore, upon all dairymen to grow a patch of fodder corn, and, even if it should not be wanted for soiling, there will be no loss, since the crop can be used for corn fodder, thus not only increasing the supply of good milk at this season, but taking the place of hay and making an important saving in the most expensive kinds of cattle food.—*Rural New Yorker.*

Food for the Mind.

Epicures and cooks have taxed their brain heavily in studying up an endless variety of edibles wherewith to surfeit their mortal bodies. Most of the newspapers and some other publications devote a large space in their columns to receipts for cooking; and many of them if followed, would produce food which no one ought to eat unless they have the stomach of a shark. But people will eat rich food, and we see the results every day. Why, we Americans are a nation of dyspeptics! We need more plain, wholesome, nourishing food, and less rich pastry. Good bread is the staff of life, and if we lean on that we' grow strong and healthy. If we bring up our children on plain, wholesome diet, they grow tall, erect, strong and healthy. But if we feed them on rich cake and fancy pastry, and fill their stomachs with all sorts of trash spiced up to tempt the appetite beyond what nature requires, their appetites become depraved and they loathe the food best calculated to make them grow healthy and strong; and, in consequence, they grow pale, poor, puny and weak. Just so with the mind. Our minds ought to become clear and strong, enlightened and elevated. There is food that is healthy and nutritious for the mind. But the literary cooks have served the public with so much highly seasoned food, that the tastes of their readers, especially that of the young, have become vitiated and they turn with disgust from good, solid, instructive reading, which would improve their mental powers, and make them intellectually strong, and help them to become useful members of society. But they eagerly devour literary pastry, if *highly spiced.* They crave sensational reading; romance and fiction; pathetic, comic and tragic. And this exciting reading, so stimulating to the brain, is tempting, and they read too much. The consequence is, their minds become dwarfed and sickly. They gain no real knowledge, but the brain is weakened, the memory ruined, and intellectual vigor destroyed; and these mental dyspeptics are about as unfit to grapple with the stern realities of life, as a worn-out, haggard, physical dyspeptic is to endure the hardships of a soldier's life in a campaign against the Modocs.

Our cook books are filled with too many rich receipts; and our literature is crowded with too much love-sick sentimentality and exciting fiction. Our stomachs are not satisfied with cake and pie; there is a gnawing faintness still. Neither are our minds satisfied with light reading. The more we read the more we may, and still be hungry for "something to feed the mind." Come, you who are educated, and well qualified to become teachers to us poor ignorant rustics up among the hills; seize your pens and give us more good, plain, sensible, substantial and nourishing "food for our minds."—*Cor. Maine Farmer.*

Improved Cattle at the South.

Among the few southern men who have urged the raising of stock in place of cotton-growing, is ex-Governor Aiken of South Carolina. He is earnest in the advice to keep sheep and says the soil and climate are well adapted to the Merino. The Germantown Telegraph in discussing the subject, says:

It is a common belief that the improved breeds of cattle will not thrive in warm climates, and that this has been thought so indisputable that it has stood very much in the way of improving stock-raising in the South. The southern people are anxious to buy, and northern breeders are anxious to sell; but the business is at a standstill because of this belief. A few years ago a party of agricultural editors and correspondents made a visit to the Southern states, in which party the Germantown Telegraph had a representative, and, as we learned from him, nothing seemed to give the party more astonishment than that the southern people seemed satisfied with such comparatively poor stock; and this was remarked by some of the party in little speeches which now and then some semi-public occasion seemed to call for. But these suggestions were always met with the objection that attempts had frequently been made to introduce these improved breeds, but all these were failures, the climate seeming to render them more subject to disease than native stock, and that all or most all of them died very soon after their introduction to the South.

This seems to have been founded on facts. Valuable cattle have been taken South and have succumbed, while the ordinary long-horned animals of that section do very well.

But recent experimenters, and notably among them, Col. Withers of Mississippi, find that if the cattle are taken there very young, or if the parents can be kept there long enough to raise calves on the spot, the young so raised do remarkably well; as well, indeed, as the old stock, native to the spot. All this seems reasonable. It is about the same with human beings. The northern man, full of restless activity, the product of his conflict with the harsher northern elements, finds the climate of the Southern states too much for him, and in unfavorable seasons suffers much more than the man bred and born there. The principle is no doubt the same with cattle-breeding. It seems so plain indeed, that it is only a wonder that it has not been recognized before. There is little doubt that, understandingly pursued, the introduction of improved cattle can be made as successful South as North.

Pickling Cucumbers for Market.

Cucumbers may be planted any time this month for growing pickles, if the soil is well prepared and liberally fertilized; but one should know something about the prospects of selling the crop before investing in the business to a very great extent:

For pickling purposes the cucumber in all stages of its growth is used, from the large vegetable which is cut into slices and sold to the cheap grocery stores, to the smallest size or gherkin, which is preserved entire. In buying and selling and estimating quantities, cucumbers, whether large or small, are counted, not measured. The farmers sort the cucumbers into three sizes, small, medium and large; the factories have five sizes, viz.: very small, small, medium, large, and very large. 5000 of these different sizes 5000 of the very small would fill an ordinary whiskey barrel; 3000 of the small; 2000 of the medium; 1400 of the large; and 800 of the very large. The cucumbers, on being picked at their place of growth, are taken by the farmers to the salting-houses, whence they are removed to the pickle factories. Most of the salting-houses are within a few miles of where the plant is grown, as the fresh crop will not bear long transportation. Although some farmers do their own salting, in most cases the latter is a separate business, conducted on a large scale, the manufacturers buying of the salters. The pickles, on being taken from the brine, are "freshened up," that is, they are put into large wooden vats containing fresh water, to extract the salt. The water is changed three times during the freshening process, after which the cucumbers are packed in casks or bottles for sale. The best vinegar in use for pickling in this country is that made from the western high-wines. In a vinegar made from wood the pickles become soft, and even cider vinegar, though the best and most wholesome for table purposes, will not preserve pickles more than a month. All the artificial vinegars made from acids fail in this respect, those from vitriol especially. Cucumbers pickled in high-wine vinegar will keep for an almost indefinite time, and will come out as good as at the first, after an interval of seven years. Large quantities of very fine cucumbers and cauliflowers are imported from Holland, which country likewise supplies the London market. The pickles which are thus imported extensively into this country have the advantage of low prices, due to the cheapness of labor abroad, and, in addition to the best possible sample, with the least amount of trouble at the factory. With the requisite amount of care and attention, we can, in this country, make as good a pickle as can be made in London.

Value of Manures.

Dr. Sturtevant gives in the Scientific Farmer the following estimate of the value of cow dung and horse dung and their equivalents in chemicals.

COW DUNG.	Cart load.	Ton.	Cord.
Nitrogen	6.40 lbs	7.00 lbs	30.40 lbs
Potash	6.12 lbs	7.20 lbs	28.80 lbs
Phosphoric acid	2.72 lbs	3.20 lbs	12.80 lbs

HORSE DUNG.	Cart load.	Ton.	Cord.
Nitrogen	7.42 lbs	10.60 lbs	23.85 lbs
Potash	7.14 lbs	10.20 lbs	22.95 lbs
Phosphoric acid	5.74 lbs	8.20 lbs	18.45 lbs

Calling phosphoric acid worth 12 cents a pound, potash 6 cents, and nitrogen 25 cents a pound, we have the following values:

	Fresh horse manure.	Fresh cow manure.
Cart load	$2.80	$ 2.24
Ton	4.13	2.63
Cord	9.30	10.54

The amount of chemicals which would answer to the chemical equivalent of this dung, is as below for stable dung. We could take for the cord:

132 lbs. pure superphosphate at $40 ℔ ton, =	$2.64
183 lbs. dried blood at $60, =	5.49
43 lbs. muriate potash at $60, =	1.29
Total 358	$9.42

OR

	Nitrogen	Phos. acid.	Potash.
184 lbs. refined guano, =	5.5 lbs	18.4 lbs	3.6 lbs
141 lbs. dried, =	18.4 lbs	....	...
37 lbs. muriate potash =	....	....	19.2 lbs
Total 362	23.9 lbs	18.4 lbs	22.8 lbs

Of a value of $11.32.

From these tables a farmer may learn much—the value of manure of the best quality, and its value as compared with fertilizers; always bearing in mind the cost of application. Also, the necessity of using head work in buying fertilizers so as to obtain the most for his money. A little carelessness here may cost much. In the two calculations given, we have the same quantity of valuable ingredients; costing in the one case $9.42, in the other $11.31—a difference of $1.90. Sufficient pay, indeed, for a few moments of study.

Killing Red Spiders in Hot Beds.

A correspondent of the Journal of Horticulture gives the following directions for killing the red spider either in greenhouse or hot-beds:

One of the best means of eradicating this pest, and one which I have successfully practised for many years, is by creating fumes of sulphur with the aid of heated furnace shovels. If the operation is performed with due care every spider will be killed, and not a leaf of either vines or cucumbers will be injured. If, however, the work is loosely or carelessly done injury will inevitably be committed. But of this there is no real danger, for a safety valve is always present, which if regarded will lead to satisfactory results. My mode is as follows:

On the evening of a still day, and after the house containing the spider had been closed, I secure the aid of two assistants. One heats a shovel at the fire, and runs with it to the door of the vinery. Here is placed a careful man with a pot of sulphur, which he sprinkles very slightly on the shovel, and the sulphur at first burns with a flame. This is the danger signal. In a few moments, however, the shovel cools and the sulphur smoulders, showing no incandescence whatever—that is the safty valve. At that stage he hands it to me inside the house, and I sprinkle it freely, and continue to do as long as fumes are emitted. In the meantime other shovels are being prepared outside. In a quarter of an hour I have a light blue atmosphere, and as soon as my eyes commence smarting I leave the house.

In the morning I have invariably found every red spider dead, and every leaf alive and uninjured. The slightest incandescence of the sulphur inside the house will cause injury to the foliage, but I have never found the slightest harm to result if the precautions named have been duly carried out. It is a matter on which none need err, for it is easy to perceive when the sulphur does not show a flame outside, and as easy to know when one's eyes smart inside the house. I have practiced the plan for more than twenty years, and always with the same result of killing the spider and not injuring the foliage of vines, cucumbers, or melons.

What is High Farming?

An American farmer of note, after visiting England and examining, with the critical eye of a practical and experienced agriculturist the system pursued there says:

"I am thoroughly confirmed in my old faith that the only good farmer of our future is to be 'the high farmer.' There is a widely prevailing antipathy among the common farmers of our country against not only the practice of high farming, but against the use of the phrase by agricultural writers. This is all wrong, and should be at once corrected. Through some misconception of the meaning of the phrase, and of its application, they have come to look upon it as synonymous with theoretical 'book farming, new-fangled notions,' boasted progress followed by disappointment and final failure. This is all an error. High farming simply means thorough cultivation, liberal manuring, beautiful crops, good feed, and paying profits therefrom. It is not strange that misconceptions have arisen in the minds of doubting farmers who have been eye-witnesses to some of the spread eagle experiments of enthusiastic farmers, better supplied with money in a business they knew how to manage, than with practical experience on the farm. Bountiful crops and paying profits, of course, are what all farmers who are depending on the farm for an income, are striving to obtain; and every year as it passes is reconfirming the opinion that profits are small and will grow beautifully less where high farming is not practiced.

Good Tillage.

In the head line of one of our agricultural papers may be seen every week the broad statement that "good tillage is manure." There is in this statement a good deal of truth very concisely expressed. While good tillage is not really manure, it is capable of greatly aiding manure in its work, and, under certain conditions, may be made in a great measure to take its place. There is no doubt that with good culture as large crops can be produced with a small quantity of manure as can be obtained with a much larger application of fertilizers and inferior tillage. It is a well established fact that very large crops have been grown on ordinary land without manuring, and that the only reason of this success was the thorough tillage which was given. Even worn-out fields have been made by extra culture to produce fine crops. Many years ago we read of an Irishman who bought a little patch of light land, which had been so thoroughly exhausted as to be considered incapable of producing a paying crop. He determined to sow the piece with rye, and long before the time for sowing he might be seen almost every morning while the dew was on plowing the field. After a while he stopped plowing, remarking that if he should plow it any more the rye would lodge. The neighbors thought this a good specimen of Irish intelligence and made a great deal of sport over it. They were confident that he would not get rye enough to pay for his work. But the rye came up, grew and ripened and when a large yield was harvested, the neighbors concluded that the Irishman knew a great deal more than they had thought he did. They could not account for it, but the fact was before them and they could not deny it. Finally they came to the conclusion that plowing when the dew was on was the chief cause of the large yield, but it was not the dew so much as it was the fining of the soil, which produced the heavy crop. Under the ordinary system of culture the soil had been exhausted, but considerable plant food still remained in clods and lumps, which the rootlets of the plants could not penetrate and consequently could not obtain. But the constant plowing and re-plowing of the field pulverized these clods and set the plant food free. The rye was able to obtain and utilize it, and it consequently was very productive. A case somewhat similar once came under our own observation. A man leased a tract of land, which was cold and wet, and produced nothing but sour grass and weeds. He dug some ditches, plowed the land, harrowed it with a great deal of care, and planted it with corn. He used but little manure and on much of the piece, used no fertilizer except plaster and ashes. But he finely pulverized the soil before planting and cultivated and hoed the crop very often during the season. The neighbors were confident that he would not have any corn on that land without manuring it, but he did obtain a fine crop, and when the piece was seeded down, grass came in nicely and a good crop of hay was obtained. This was almost wholly owing to good tillage, for without manure the land would not, with ordinary culture, have produced half a crop. Such cases are common enough to prove beyond a doubt that good tillage is capable of largely increasing the production of the land and farmers ought to take advantage of this. Of course we do not advise any one to neglect to manure his land and rely upon good culture to produce good crops. All crops are obtained at the expense of either manure or soil, and if no fertilizer is applied they will inevitably injure the land. The true way is to manure well and also thoroughly cultivate the crop. Thus the advantages of manure and culture may both be secured.—*New England Homestead.*

Following is an extract from a paper on Scientific Fertilizing, read by Mr. Conrad Wilson, before the American Institute Farmers' club:

To supply the soil with plant food of the right kind, in the right proportion, and in the best condition for immediate effect, is to-day the great problem of our husbandry. Earnest farmers are everywhere discussing this question, and earnest thinkers in both hemispheres are endeavoring to solve it. Nor is it surprising that public interest is excited on a subject so important; for the man who liberally feeds his growing crops, is at the same time feeding his own household, and helps to feed the human race. There are at the present time two leading systems of fertilizing that divide the attention of farmers on either side of the Atlantic. Both of these theories are of chemical origin, and consequently both of them find some prejudice to encounter among practical men. The system of Prof. Ville, introduced some years ago in France, and still gaining adherents both there and elsewhere, is evidently the parent of the more recent theory proclaimed by Prof. Stockbridge, of Massachusetts. Though both methods are sound in their first principles, and each claim to be, and is to some extent an improvement on former methods, yet, when the formulas of each are analyzed, and the net results examined it will be found that the yield per acre and the cost per bushel do not thus far warrant the claims put forth, nor satisfy the expectations of practical men. The theory of Prof. Stockbridge, though differing essentially on some points from that of Prof. Ville, has one point of resemblance. They both claim that chemical fertilizers are sufficient for all the purposes of farming, and capable of better results than animal dung. Whether the time has yet come to dispense with barnyard manure is, to say the least, very doubtful, and it will require the clearest kind of evidence to convince farmers of this fact. The contrast on some points between these systems is not easy to reconcile, and yet it is too important to be overlooked. Though both methods have given in certain cases encouraging results, yet some of the formulas of each are a standing protest against those of the other.

Soap suds may be used with great advantage for manuring grape vines. Downing says he has seen an Isabella grape vine produce 3000 fine clusters of well-ripened fruit in a season, by the liberal use of manure and soap suds from the weekly wash. The effects of soap suds on other plants are remarkable. A cypress vine that had remained stationary for a fortnight, when about two inches high, immediately began growing after being watered with soap suds, and grew about six inches in five days.

Don't allow your carriage to rattle like a threshing machine. Washers of sole leather on the spindles of axle-trees will stop the clatter caused by too much "play." A piece of rubber put in between the thill iron and clip will silence matters; and a little coal oil on the circle or fifth wheel, will stop squeaking. Where nuts work loose, cut a thread in front of them with a cold chisel after screwing them up tight.

A farmer ought to be a good judge of every particular which relates to the good ordering of his farm.

Breaking Colts.

The Rural New Yorker says:

There must be a good deal of misunderstanding and some ignorance about the handling of colts. I have seen hundreds of Welsh colts brought into England which were foaled on the mountains, and never touched in the way of breaking, and they are haltered in the fairs by drovers, hauled out of the drove and pulled about by main force, and there is no danger apprehended from falling.

In England, the nag colts, sired by thoroughbred horses, which farmers breed to sell as carriage or lighter horses, and also those intended for saddle exclusively, are generally broken by men who make a living at the work, and these men, who are termed "colt breakers," will all say they can get on much better and bring a colt to a good mouth and to his paces much better when he has never been handled by inexperienced people.

Colts with good blood, that is, of the "nag" species, as it is termed in the Middling counties, are always broken to the saddle first, for riding on horseback is universal there, and a nice mouth is of much more importance in every horse as "good hands" are in every rider. There was no intention of saying the correct method was to let all colts run till three or four years' old, the most meant was to show there was no necessity to halter them where it was not always convenient to do so before they were required for work.

Shade Trees by the Roadside.

The Germantown Telegraph agrees with the FARMER as to shading the highway. It says:

It has long been a mooted point whether or not shade trees are desirable along the highway. There are two sides to the question, both of considerable strength. We have not ourselves been an advocate for such trees. The shade is very grateful for three or four months of the year, but the rest of the year they are a decided disadvantage. They are very damaging to even macadamized roads, not merely while they are in leaf, but through the winter and spring, as any one may see for himself. Stoned roads in winter where the shade trees prevail are kept in a moist condition and require twice the expense to keep them in repair, than stretches where there are no trees. In dirt roads the injury is still more clearly seen, as they are nearly all the time muddy, the sun having no chance to dry them up, and they are generally next to impassable in winter and spring. The New York legislature at its last session thinks with the majority on this question, and has enacted a law paying owners of property for planting trees along the highways, one dollar for every four trees at least one year planted, to be set at certain distances, and protected while young against cattle. This is an official endorsement, but yet it does not disprove a word we say.

GROWING FLAX FOR EXPORT.—Some statements about the growth of flax for export, that are calculated to mislead, have recently been widely published. It would be a costly mistake if farmers should be led to raise flax with the expectation of finding a foreign market for the fiber that should be profitable at once, both because we cannot expect to compete with those producers who are nearer to the manufactories, and because it is certain that to raise raw material here to send abroad, and to buy manufactured linens abroad for use here, is a losing business. By-and-by we shall manufacture all the flax we can produce, but before that time comes we must have the fiber, else manufacturers will not be induced to build mills to spin and weave it. Farmers may therefore grow flax fiber for shipment to foreign countries if they will, but the returns will be small at first. This is inevitable. To commence the business will lead to a loss at first, but doubtless the comparatively small loss for a few years would be an ultimate gain, not only for farmers, but for the artizans who would work in the mills, and for all who would use the linen goods, both fine and coarse, which would be manufactured. As it has been with the cotton business, so it is likely to be with the flax and linen business.—*American Agriculturist.*

THICK OR THIN SKIN.—Almost universal is the rule that the skin of fruits or vegetables, has much to do with their value. A potato with a thin skin does not handle well for market. The thick skin also acts as a preservative for keeping. This rule applies very generally, and aids us in judging of their value; but at the same time the thin skin is an index of fine quality generally. The thick skin also resists disease. Mildew and scab, or rust, do their work on thin skins in fruit of all kinds, much oftener than on thick. In judging of new fruit and vegetables, these things help to decide their probable value. Many of our best fruits are too thin skinned to be grown with profit. The leaf must also have substance to withstand the changes and extremes of our climate. Now there is a moral to this that applies to the *genus homo.* Some of our humans are too thin skinned, too sensitive, to be of real use in this world. And there are those who, like some fruits, are too thick skinned to be of much value in society.—*New England Homestead.*

HUNGARIAN FOR COWS.—The following is the testimony of Dr. Loring respecting Hungarian grass: I believe I can make more milk with this grass, cut and mixed with corn meal and shorts, that I can with the best timothy hay, cut and mixed in the same manner. And when you remember that you can raise on ordinary land, by sowing the seed of Hungarian grass late in June, from two and one-half to three and one-half tons of good fodder to the acre, and this crop can be sown after we have ascertained whether we are to have a good crop of hay or not, you will see the value of this grass. I have such a high opinion of it that on my farm this year and last, I raised from seventy-five to one hundred tons of it for the purpose of feeding to my milch cows during the winter.

LIME AND SALT.—Prof. Johnson recommends for fertilizing purposes to mix one bushel of salt and two bushels of dry lime under cover, and allow the mixture to decompose gradually, thus forming chemical union. For this purpose the mixture should be made six weeks before use, or still better, two or three months, the heap behind being turned over occasionally. The salt and lime mixture, when applied at the rate of twenty or thirty bushels per acre, forms an excellent top-dressing for many crops. It acts powerfully on the vegetable matter of soils; fifty-six bushels applied to turnips have produced as large a crop as barnyard manure. It is destructive to grubs and insects in the soil. Like salt it attracts moisture from the air, and is useful against drought. Its decomposing power is remarkable, and if three or four bushels of it are mixed with a load of muck, the latter will be thus thoroughly powdered.

FACT AND FANCY.

Not amiss—a rich and lovely widow.

The Sponges of Florida yield $240,000 a year.

Clerical errors—Departing from the path of rector-tude.

Every one complains of his memory, and no one complains of his judgment.

A Vermont singer is said to have a gold mine in her voice. Her notes ought to be good.

A man who a few years ago was worth $80,000 is working out a fine on the streets of Richmond, Ind.

The western fruit crop promises to be the largest ever produced, and wheat never before made so good a show.

This is the latest form of wedding invitations: "Come around and see me capture a mother-in-law at eight o'clock sharp."

Every man can make himself useful in this world, if only by holding a sunshade over a young lady who is playing croquet.

A young manufacturer is making money fast on this motto parodied from "Poor Richard:" "Early to bed, and early to rise; never drink and advertise."

An editor who evidently knows what he is writing about says that in New York State the inhabitants don't permit liquor of any kind to become two years old.

Geo. Cruikshank, aged 84 years, touches nothing but water.—*Ex.* How the dickens does he button his suspenders, and his shirt collar, and so forth!—*Norr. Herald.*

By request of Dennis Tobin, of Cohoes, N. Y., a Catholic, six Protestant men were chosen as his bearers. This is the first instance of the kind on record in that vicinity.

Dean Swift was once accosted by a drunken weaver, who staggering against him, said, "I've been spinning it out." "Yes," said the dean "and now you are reeling it home."

We shall hail the day of female suffrage, for then the monotony of seeing a rooster at the head of every victorious newspaper will be relieved by the occasional interspersion of a hen.

Lucy Hooper, speaking of Paris, says: "Of wickedness, painted, glittering, gorgeous, alluring, there is enough and to spare; of chaste, permitted, honest love-making there is not a trace."

It was a New Jersey wife who said, "My dear, if you can't really drink bad coffee without abusing me, how is it that you can always drink bad whiskey without abusing the bar-keeper?"

A farmer complains that a hook-and-ladder company has been organized in his neighborhood. He states that the ladder is used after dark for climbing into his hen-house, after which the hooking is done.

A student who failed to pass in his Greek history examination, repudiated with scorn the insinuation that he was not prepared. He had crammed himself, he said, so tight that he could not get it out again.

"What brought you to prison, my colored friend?" said a Yankee to a negro. "Two constables sah." "Yes but I mean had intemperance anything to do with it?" "Yes, sah! dey was boof of 'em drunk."

To destroy potato bugs, mix one gallon of prussic acid with three ounces of rend-rock, stir well and administer a tablespoonful every hour and a half till the bug shows signs of weakening. Then stamp on him.

When a brisk breeze is blowing about the coattails of pedestriang, it is rarely a man has sufficient nerve to preserve an unconcerned air under the consciousness that a new half sole has lately been put on the seat of his pantaloons.

A southern editor says of a rival editor, that he is inclined to deny the crime of being red-headed. Well, you may call it auburn or blonde, or anything else, but our impression is that he would be entitled to first place in any torchlight procession.

The adulteration of liquor," said a punning judge, who was trying a culprit for mixing sand with his sugar, "is a case of gross wrong, but the adulteration of tea, sugar and such articles of common necessity is certainly a *grocer* offence."

A cool young gent entered a menagerie with a cigar in his mouth, when the proprietor politely requested the visitor not to teach the other monkeys bad habits. The young man proved himself equal to the occasion by producing a cigar case and saying: "Try one."

Why the English should be continually singing "God save the queen" is more than a reasonable man can conjecture. It is always advisable to save the jack; but the queen only counts two for game, and is always a good card to throw away.

An absent-minded editor having courted a girl and applied to her father, the old man said: "Well, you want my daughter; what sort of a settlement will you make? What will you give her?" "Give her," replied the other, looking up vacantly; "Oh, I'll give her a puff." "Take her" replied the father.

A story of remarkable self-control is told by the London *Builder* of a slater named M. A. Karis, a Belgian. This man was engaged with a companion in fixing a lightning conductor on the summit of a church steeple at Ville-Sur-Ourthe, Belgium. Karis was supporting the other man upon his shoulders, and this workman accidentally spilt some molten lead upon the other's forearm. The pain of course was intense, but knowing that the slightest movement might precipitate his companion into the street Karis remained motionless while the lead burned its way into the flesh. The men were at a hight of seventy feet from the ground.

A case of rather sharp practice is said to have been practiced on a farmer at Niagara Falls who raises tobacco. Two men, who afterward proved to be revenue officers, called and talked as if they wanted to buy his stock. Selecting several samples they offered to pay for them; but on his steadfastly refusing to accept it on the ground that he always gave away samples, they left forty cents on a box and went away. The farmer now finds himself prosecuted for selling tobacco at retail without paying the revenue tax thereon.

New York pays to its governor an annual salary of $10,000, which is the highest paid in the Union. Louisiana pays $8,000, California $7,000, Nevada $6,000. Eight states—Kentucky, Massachusetts, Missouri, North Carolina, Pennsylvania, Texas, Virginia and Wisconsin pay $5,000; Maryland, $4,300. Three states—Alabama, Georgia and Ohio, $4,000; Arkansas, South Carolina and Florida pay each $3,500; Kansas, Indiana, Minnesota, Mississippi, New Jersey and Tennessee pay each $3,000; Illinois, Iowa and Maine pay each $2,500; West Virginia pays $2,700; Connecticut $2,000, Oregon, $1,500, Delaware, $1,300, and Michigan, Nebraska, New Hampshire, Rhode Island and Vermont pay their governors respectively a salary of just $1,000.