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Agriculture.

SUGGESTIONS REGARDING PLOUGHING.

A correspondent of the New York Country Gentleman, writes on the subject of Autumn Ploughing, and "the best time to do it." We extract that portion of it which seems most applicable to our locality:—

Sandy soils, may be worked most at any time, as the rain will melt and melt snows immediately off. Late fall, winter and early spring plowing may therefore be freely engaged in, except soon after a rain, where there is a large proportion of clay. All depends upon the amount of clay, that difficult thing to handle. Where it can be done as well as not, sandy soil may be plowed in the spring and this is the advisable way where clay soil also is to be plowed, which may be done in the fall, many farms having both varieties. Sandy ridges, exposed to the wind, should be reserved for spring plowing, where the soil is fine; and also clay, if dry and powdery, as the wind will remove the surface soil, or the rains wash it down. If the land is clean, stubble may be turned down on sandy soil early in the fall; and this is preferable where spring work is urgent and much fall plowing is to be done. There is no danger of its packing too much. As to soil turned down, the danger is in its appearing of the grass. But stubble or sod inverted on sandy soil should precede plowing clay, trusting to the season and to drainage for success with late plowing. Sand has this advantage over clay—that should grass or weeds appear from early plowing, the land can be re-plowed in spring with little risk from harm as to moisture, and be benefited otherwise. It is planned down wet, and a heavy snow follows and remains during the winter, packing and keeping off the frost (as in the case in some sections), no good seed bed can be obtained; the ground will be hard when dried, and a thoroughly mellow condition is impossible, however, much work may be bestowed upon it. Sand, on the other hand, works up mellow at once. The object of the farmer, therefore, must be to see what he can do with his clay soil, letting the working of the sandy soil be brought in as best it may, as it will adjust itself to almost anything. It can be plowed during winter, in the absence of frost and snow, and this makes it an advantage to have both kinds of soil.

It is a good point of importance—not with sand, but with clay. It is an old practice to turn up a little raw soil and expose it to the frost, to be mixed with the other soil when put in in the spring. This practice is continued each fall till a good depth is reached, and the plan has proved a good one. Not that the raw soil will be changed by the frost so as to add much, if any, to the plant food the first year, but it will add to the body of the soil, and in a year or two augment the fertility. I have my suspicion, derived from experience, that instead of benefiting the first year, especially if a cold spring, the crude soil brought up is rather a hindrance to the growth; and if the soil is not rich, it should be aided by manure, applied after the land is plowed in the fall, and spread evenly at the time, so as to be ready for the barrow in spring. The manure, besides serving as plant food, will aid the elements in preparing the raw soil. To bring up much of the latter at one plowing is to fail of a paying crop the next year, and the effect will be felt the year after; it should not be done in tillable soil, but it would be benefited by under-draining. When well drained, less attention is necessary; the crude soil having been partially acted upon before being brought up, will be sooner reduced to the proper condition, and less restraining to the crop.

Some soil is so wet from lack of drainage, that it is always difficult to sow it in the spring, and when sowed it is late, and the ground in bad condition. It is the fault of the soil in narrow "lands," from 6 to 10 feet in width, narrowing from the larger figure as the ground is wetter; the plowing, to be up and down, slopes so that the open furrows may readily carry off the water. In the spring, as soon as the ground will barely do to pass the barrow over, it should be sowed, and the water should be liable to being packed and spread by the rains till too late, and unfit to put in; and it does not require much rain to do this. Even should there be no rain, the first chance for sowing is the best, as it finds the soil more or less loose from the effect of the frost. Fortunately, the ground is in the best possible condition this fall for plowing in this section, for all kinds of soil as there have been no late heavy rains—only just sufficient moisture to mellow the tillable soil. Cover this, where clay predominates, with an evenly-spread coat of manure, after plowing, and nothing can be finer than the seed bed will be in the spring. Quite poor soil can thus be reclaimed almost at once, as the texture and fertility will both be improved, in addition to the best of chances for stocking down. The present autumn sowing offers a rare chance for improving our clay lands, particularly those that most need it.

WINTERING THE CELERY.—Of all the crops of the garden the celery is the most uncertain, the most delicate, and the most expensive to grow. It is more than all else; it is most difficult to keep in a sound condition through winter and to the middle of the month of April at least, as it ought to be, to compensate the producer

fully. We profess to have had a good deal of experience with the celery crop, and we have usually as successful a yield as is to be found in any well managed garden. In storing the crop for the winter we have usually pursued two modes which have answered well. The first is to remove the celery to high and dry ground, dig a straight trench space deep, stand up a row of plants singly, then another row, with some earth between, and so on until about half a dozen rows, are finished, when commence another bed, and so on. The soil should be packed in firmly and then banked up so that the tops of the celery are just covered, then spank off roof fashion to turn the rain. Over this two wide boards, nailed together, should be placed, as a security against moisture, or straw can be bent over and secured at the bottom with bean poles, and a little gutter to carry off the water at each side. Celery put away thus care fully ought to keep till May. Another plan is to sink barrels into the earth so that the tops are two or three inches below the surface, then stand them compactly full of celery, without any soil; put tight covers upon them, so as to exclude all moisture, and then a couple of inches of soil. For early consumption—that is to say in December or January—it can be preserved in the rows where it is grown, properly covered and protected against moisture.—German town Telegraph.

FOREIGN LIVE STOCK OF MEAT IMPORTATION INTO ENGLAND.

Exceedingly large quantities of cattle and sheep, and quantities of pork, beef, and carcasses of mutton are weekly imported from America into England. The business is on the increase, and offers great opportunities to the breeders of first class stock. From the continent of Europe and America, both supplies are sent, and the demand never seems to fall below them. The North British Agriculturist says of the last weekly arrivals of both live stock and fresh meat at Liverpool from America were exceedingly large, and as regards the former the number has never been surpassed.

The arrivals of both live stock and fresh meat at Liverpool from America were exceedingly large, and as regards the former the number has never been surpassed. The recent heavy weather seems to have had little effect upon the importation of live animals, as their condition on arrival, in most instances, has been satisfactory. The number of sheep was double that of the largest weekly arrivals that has yet been placed. The conveying steamer were the City of Brooklyn, with 501 head of cattle and 2048 sheep; the Quebec, 146 cattle and 1882 sheep; the City of Bristol, 327 cattle and 1400 sheep; Bohemian, 521 cattle, 275 sheep, and 269 pigs; Victoria, 220 cattle, 261 sheep, 550 pigs, and 10 calves; the Lake Champlain, 1151 sheep; and the Lord Olive, 405 head of cattle. Of fresh meat the Germania brought 1500 qrs. of beef and 200 carcasses of mutton the Wyoming, 700 qrs. beef and 150 carcasses of mutton; City of Brussels, 600 qrs. beef and 110 carcasses of mutton; Egypt, 557 qrs. beef and 75 carcasses of mutton; and the Lord Olive, 863 qrs. of beef and 710 packages of butter. The totals for the week were 2120 live cattle, 6500 sheep, 809 pigs, 10 calves, 4250 qrs. of beef, 536 carcasses of mutton, and 710 packages of fresh butter.

RAISING HORSES ON THE FARM.

The following observations on the "raising horses on the farm," though not written for our latitude, contains hints and suggestions which are worth consideration of farmers in New Brunswick:— The farmer need not breed horses on a large scale, but every farmer, it seems to me, should breed them on a small scale. The farm team should be good, serviceable, well bred mares from the Clay, Hamiltonian, Champion or Mambrino families. Every farmer in Schuyler knows that a farm team, when the farmer can keep but one or at most two, is better and more serviceable for all the different kinds of work that is required upon a farm, from this class of mares, than from any other. Even in these times of financial depression, well selected horses of this class are as good an investment as the farmer can make, and they will do all his work, and do it well, whether at the plow, the drag, the machine, the reaper, or upon the road, where in this age of steam the farmer as well as other men are obliged to be much more of the time than in past years. The principal heavy work for a team is, as we work land, mainly required in the early spring. It is that which tries the team most, and the want of the use of the team for this work that deters many from raising colts, who otherwise would. To such, and indeed to farmers and small breeders generally, who wish to use their mares in business or upon the farm, I would strongly recommend the raising of fall colts. There is much to be said in favor of it. It does not interfere with a fair and reasonable use of mares in the spring work. The colt should be dropped so as to give a month at grass, and if a little late, it will be found the best for the dam and foal.

A fall colt gets, in the nature of things and from the necessities of the case, a much better chance, than a spring colt, as a general rule among small breeders. The mare has to be grain constantly, from even the most careless of men, when it is housed in the fall or winter with its dam. It is the almost universal custom to turn the spring colt to grass with the dam, and it has to take the chances of poor pasture, a dry August, and to run its gauntlet of flies. The fall colt escapes this risk, and when I allude to the importance of raising a colt the first year, it must be seen how much better is the chance, ordinarily, of the fall colt on the same farm and with the same owner, than the spring, when the latter so rarely gets grain through the summer, which with the aid of a little corn in the fall, will make from 150 to 200 lbs., of pork. At 7 cents per pound, the pork would be worth \$14, which added to the \$6, will make the sum of \$20, which might be termed clear profit, for the butter and milk used in the family will repay for the trouble. This is a fair average estimate of a cow for a year, and I think the fowls are not rated too high. Some breeders will do better even than that, and others not so well.

Perhaps the cow might yield a larger percentage if the milk be sold and the yield forced by stimulating food, but the chances even then are not more favorable. It is a good cow that will yield 10, or even 8, quarts per day, day after day, for five or six months in succession. At the least calculation, a cow should yield milk for eight months of the year, and for this period eight quarts is the safer estimate. The cow must be milked wet or dry, cold or hot, at a certain time, and the milk removed either to the dairy or to the cooler, and thence to the factory or market. The time may, in a measure, be chosen for the gathering of the eggs. The eggs can wait a few hours and not spoil if the weather be unfavorable; so, also, can the hens. Hens are valuable in orchards, and can be allowed there when it would not be prudent to admit the cow for a moment. On a farm we generally calculate to keep both, but the smaller stock is apt to be neglected and treated as a nuisance.

PROFITS OF POULTRY. If possible, the buildings intended for poultry should be placed in the orchards, and should all be enclosed by a fence, or not, as the circumstances demand. Poultry and pigs are the very best cultivators and enrichers possible to find for fruit trees. While the trees are young, a little protection of the bodies from the swine is necessary, but fowls are not injurious to young trees or growing fruit. On the contrary, they are a benefit and protection. They keep the earth loose about the trunks, and clear the premises of insects. When in health, fowls are continually scratching and picking, and tearing up the old soil. It is their nature. They stow away in their gizzards many noxious worms and insects that damage either the growing fruit or the tree itself. By all means locate your hen houses in your orchards and fruit-yards, or plant orchards and fruit trees in the yards.

An "egg farm" and pray why not? Ten good hens will pay as large a percentage on the money invested as a good cow, and with less labor, and no expenditure of utensils or fixtures, beyond a comfortable home, and quiet unmolested quarters. A single hen does not require much ground for range and forage, but where many are kept, a considerable area is necessary. A hen will produce from 150 to 200 eggs in her first year; and reckoning at the lowest number from a single hen, amounts from ten fowls to 1500 eggs, or 125 dozen annually. Allow the average price of 18c. per dozen it amounts to \$22.50. A hen will consume a bushel of grain annually. (Some hens will not do it, and others will require more.) The hens should be kept in good laying condition. No account is made of course, of the grass or other green food or animal diet, as it foots up little or nothing in cash output. Allowing a bushel of corn to a hen, ten fowls will need ten bushels, and reckoning it at 60c. per bushel (which is more than the farmers have been receiving on an average for the past, or will receive for the coming season), it amounts to \$6, which taken from the total yield, leaves \$16.50. This might be called net profit. The first outlay for the hens, if purchased, should not exceed \$10. Good hens, if choicely bred can be bought for that sum. Of course fine hens, bred to a feather, with fine points, will always command a higher figure, as their beauty fits them for exhibition purposes, but their plain sisters are equally as good, if not better, for egg-production. Besides there is a chance of getting a few fine chicks. A still larger profit may be obtained where the fowls are raised in one's own yard.

Eggs pay better than the raising of chickens, but chickens must be reared, as the stock of hens should be

kept up; and if the yearly supply of pullets is not raised the business runs behind hand. There are not many who follow the poultry business. Most lose their stock of patience from one cause or another the first season. Hens give their owners quick cash returns. A good common farmer's cow is worth from \$45 to \$50. A good cow will make two 80 pound firkins of butter per annum, which, at 20 cents per pound, amounts to \$32. This is not clear profit. The keeping of the cow, at the lowest estimate, costs 50 cents per week, which, for 52 weeks, amounts to \$26, leaving \$6 to pay for the work. Beside this, the refuse milk will keep a pig growing through the summer, which with the aid of a little corn in the fall, will make from 150 to 200 lbs., of pork. At 7 cents per pound, the pork would be worth \$14, which added to the \$6, will make the sum of \$20, which might be termed clear profit, for the butter and milk used in the family will repay for the trouble. This is a fair average estimate of a cow for a year, and I think the fowls are not rated too high. Some breeders will do better even than that, and others not so well.

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AGRICULTURE AND INDUSTRY. Afghanistan is, at present, a very interesting country to English people everywhere. We have lately seen some particulars regarding the features of the country, the character of the people and its history.

The following information regarding "Afghan" Agriculture and Industry, being the summary of the Russian military department's notes on these subjects, sent to the London Times by its Berlin correspondent, be not, under the circumstances, out of place in these columns:—

So far as is known the land belongs to local chieftains, who, while letting it to vessels themselves, have to pay a tribute to their superiors. Only on the well-watered banks of rivers and canals, where agriculture attains to some degree of perfection, is the land owned or rented by individuals. Pastures are always the common property of the clans, stepping being considered nobody's property. Like all other rights and personal possessions, title-deeds are worth but little in Afghanistan. Everybody's hand being against everybody, landed proprietors are frequently expelled, or else expelling others, to transfer themselves to fresh scenes. Some emigrate to neighboring khanates, and by dint of the strong arm manage to establish themselves on ground belonging to another clan.

In consequence of the difference of climate in various parts of the country agriculture is by no means the same in the north as in the south. In Cabul the land is well watered by canals, and very fertile. In the valley of the river Cabul, from the Khyber hills to the capital, there is no barren, unproductive soil. Arable land in those parts is so extremely valuable that—a rare thing in Afghanistan—it is rarely provided with roads. There are here plenty of arks or open canals, not to speak of the underground rills, artificially laid down in some parts. These water-courses are constructed by the Government or village authorities, or by charitable individuals wishing to confer a benefit upon their neighbors. In the case of Government water-works, a tax has to be paid for their use; whereas village canals are frequently the joint property of the community.

In the Kafiristan mountains agriculture ascends to a considerable height, wherever an arable plot is to be found. In other parts, where corn cannot be sown, the hills are planted with fruit-trees in terraces. The harvest in these parts principally depend upon the amount of rainfall. South of the Safaid Koh hills in the district of Kuram, agriculture is confined to the valley of the Kuram, which in some parts is 22 miles wide. In this valley, as in all other valleys of East Afghanistan, there is a stony ledge of ground at the foot of the hills unfit for agriculture. The mountains have plenty of arable land that cannot be cultivated for want of rain or wells. Still further south, in the

"AGRICULTURE THE TRUE BASIS OF A NATION'S WEALTH."

FREDERICTON, N. B., NOVEMBER 9, 1878.

district occupied by the Mahsood Vaziri tribe, the cultivated land form only 2 or 3 per cent. of the entire area, the rest being barren for want of water. The few fields there are close to the rivers, where they enjoy the benefit of an occasional inundation. The Logar and Gazni districts, in the far west of Cabul, are well cultivated, and supply corn to the whole principality. In Candahar, from the source of the river Tarnak to the capital, the country offers but scanty opportunities for agriculture. Fields, as a rule, follow the river-banks in narrow strips, or sometimes cluster round water courses, mostly subterranean in those parts; nor is the lower valley of the Tarnak much more productive. A more cheerful aspect is offered by the Helmand Valley, having fields and garden to about two versts on either bank, as far as the Seistan lake. South of it, in a considerable barren steppe, stretching away to the hills, is here and there studded with villages surrounded by oases with artificial irrigation. Herat, possessing a good soil traversed by several rivers, is considered the most fertile part of the plateau of Iran. Here the harvests are uniformly good. There are two of them every year, yielding forty-fold. The district of Ghorbad is the store-house of the country; and such is the superabundance of land that where corn might be grown cattle are frequently pastured. Every now and then the country is the scene of Persian warfare, which prevents the development of agriculture.

Sistan, the basin of Lake Khamun and of the details of surrounding rivers is a plain intersected by low ridges. Two-thirds of the surface is sand, the remaining third being alluvial soil, capable of high cultivation, but mostly occupied by tamarind trees. The delta of the Helmand, with its many parallel water-courses, is very fertile, and wholly under the plough. The fields are here separated by quick-set hedges; the harvests are abundant, and much is exported.

Of the Turkestan khanates under Afghan control, Balkh is the most productive, thanks to its extensive system of irrigation. Notwithstanding political troubles and the consequent decrease of the population, Balkh still yields enough to supply some of the neighboring principalities. The valley of Kunduz, though fertile, is swampy, and has an unhealthy climate, compelling people to live in the hill districts. All attempts at agriculture have failed, colonists invariably succumbing to malaria.

There is a deal of arable, well-irrigated ground in the other khanates; but they are too frequently exposed to war and robbery to permit of the labor of the husbandman. In all these parts plenty of good land lies fallow.

The agricultural produce of Afghanistan is very various. Wheat, maize, barley, and millet form the principal food of the population. Rice requiring much water is only planted in the valleys of the tributaries of the Indus, in Kandah, Balkh, in some localities of Herat. The date of the Helmand, with its many parallel water-courses, is very fertile, and wholly under the plough. The fields are here separated by quick-set hedges; the harvests are abundant, and much is exported.

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introduced by Nadir Shah from Persia is only met with among the Afghan tribe. Vesir sheep and goats are very numerous, and considered the most useful animals in the country; but in Sistan, where they cannot be reared, on account of the insects abounding there, the inhabitants turn their attention to the breeding of cattle. There is a good deal of wool collected, manufactured, and exported.

DETERIORATION OF POTATOES.

A writer to an Agricultural Journal makes a curious observation relating to what he deems one of the causes of the deterioration of varieties of potatoes. He says:—"Many years ago I saw changes going on in the hills for which I could not account, and the very existence of which was stoutly denied by prominent cultivators, the changes being always ascribed by them to accidental mixing in handling. But I determined to find out for myself the cause, whatever it might be. I began by planting strong-growing varieties in alternate rows with others less strong, contriving to have both seasons at the same time. After two seasons the result began to appear in new and distinct varieties. In some instances entire hills would be changed; in others only a single eye in a tuber. And these changes extended to the time of ripening, the color of the vines, and their habits of growth and would be permanent. The first thing I learned was that the impregnation took place one year and affected only the buds or eyes, to be followed the next year by the changes in the tubers; and, with very few exceptions the quality of the variety thus produced is always inferior to that of the original. Without doubt, the laws that apply to particular varieties of vegetables, and the foreign substance enters into the circulation of the plant and deterioration is the natural result of the introduction of bad blood. This deterioration is taking place continually without the aid of man, and will take place in spite of him. Getting seed from a distance does not remedy the evil, for the cause exists universally.

The flower of the potato is what botanists call a "wind flower." It has no attraction for insects. A bee never touches it nor a fly. The pollen is carried by winds to a considerable distance, as the pollen of corn is carried, and impregnation takes place in the same way wherever there are flowers to receive it.

There seems to be but two remedies and they are but partial. One is to select the ripest and most perfect tubers from the best hills, and grow seed from them, rejecting from the product all the small and imperfect ones. This is my own practice, and from such seed plots I am careful to pick all flower-buds before they open. The other is to procure new varieties of undoubted excellence, and grow them as long as it is profitable.

THE PRINCE OF WALES AS A LANDLORD.—An old tenant of His Royal Highness writes to the Agricultural World:—"It may be said broadly that long leases are the prevailing custom of the estates. Every consideration is shown to the position and circumstances of the tenants in the renewal of their lease. An old tenant is never turned out to make room for another man who may be willing to out-offer him in the matter of rent, &c. I believe that I am not likely to be contradicted when I say that in this matter, as in many other benefits bestowed upon the tenants of the duchy, the personal influence and authority of His Royal Highness are distinctly perceptible, and that he keeps a watchful eye upon the well-being and prosperity of every farmer upon his estates. The conveniences afforded in the way of farm houses, barns, stabling, out-buildings, &c., are unusually complete in their character. The erections themselves throughout the estates are models of comfort and convenience—in many cases even of elegance. It is within my knowledge that thousands of pounds have been spent, and are still annually laid out, in order to keep up the high standard of excellence which has been attained in such matters and in effecting improvements—sometimes of a wholesale description—in order to keep pace with the times. The Prince's tenants are all permitted to exercise the privilege of shooting over their holdings."

SORE TEATS IN COWS.—When the teats of a cow are sore in any way, (having blisters or cracks in them,) it is well to wash the teats clean before milking, and have a vessel of water in reach, and often wet the teats while milking. This softens the skin. After milking apply butter and salt mixed, of about equal proportions in bulk. The salt cleanses the sores, and the butter keeps the skin soft. In a few days all are well. Never wet the teats with milk while milking.

THE BREEDING OF CATTLE, HORSES, SHEEP, &c., IN THE UNITED STATES.—Under the above heading, the New Orleans Picayune lately wrote: "There is a quiet kind of an improvement going on in the Southern States that out few people seem to fully realize. In numerous localities can be found, here and there, a man who is beginning to improve his breed of cattle, sheep, and hogs; others are attempting to raise their own horses and mules, and are bringing in better breeds of horses than we have generally had in these States. The merino sheep is beginning to attract attention in the Gulf States far more extensively than in former years. And fine stock of the merino, Southdown, and Cotswold breeds are sold a great deal cheaper than formerly. A good merino ram, formerly sold for \$75 or \$100; now they can be purchased for from \$25 to \$35. The Jersey, Alderney, Shorthorn and other breeds of cows are being introduced into the South more than ever. The improved breeds of hogs, particularly the Poland China, and Berkshire, are getting new holds in many parts of these States, such as they never had before. Improved chickens, geese, ducks, turkeys, &c., are on the increase."

PREFERENCE OF THOROUGHBREDS.—A writer in the A. J. C. C. Bulletin says:—"We have never known the Jersey bull to fail in stamping the characteristics of his race on his offspring from a native cow, at least in the second cross, and have now in mind a number of grades in which good breeders would find it difficult to detect evidence of any common blood."

But let a Jersey bull be bred to a Devon cow, and continue to cross her progeny with Jersey bulls, and in the fourth generation one need to be told what the animal is. Some modification in form may be observed, but the color of the Devon has not yielded a shade in a single hair. It has been Greek meeting Greek! The writer had such an one pointed out to him recently, whose owner proposes to continue the "mill" according to rules observed in previous rounds, and to let us know when either side throws up the sponge.

THE "HORNING" OF CATTLE.—An American paper recently described "the case of a brute who deliberately sawed off the horns of some Irish cattle received, the animals being of full age. The perpetrator was justly and heavily fined by the judge before whom the complaint was made." We regret to have to inform our contemporary that the cutting off the horns from the heads of bought-in one and two-year-old English and Irish cattle in the feeding districts of Perthshire, Forfarshire, and Kincardineshire, is the order of the day about this time of the year. Potatoes require a good deal of potash, and farmers cannot make a mistake in applying to the land on which they are grown either ashes or commercial fertilizers that contain a large per centage of potash.

HOW TO UTILIZE THE STRAW.

In mized husbandry, a farmer grows a variety of produce, and keeps all or nearly all the domestic animals. Nothing could be easier than feeding to suit the taste of his different animals. I know many old farmers who insist that their calves and colts must consume the straw. It is nothing but the most effectual starvation to restrict a colt or calf to a diet of straw. But some one asks what to do with the straw. It will not pay to sell it, it is too good; and there is too much of it for bedding. Why not feed it to young stock in preference to working horses, or fat cattle, or milch cows? I know that many of our well-to-do farmers reason in this way. Their horses are working, and must have the best hay and the plumpest oats. Beef cattle must be well fed, and must be of a kind that will not produce fat, and of course straw is not good for milch cows. Indeed, straw seem to be good for very little. An analysis of straw may show a considerable amount of nutritive matter, and yet when you come to force stock to subsist on a straw diet, the result is highly unsatisfactory. Still, straw is valuable, and many of our most successful farmers would be lost were it not for the quantity of straw they have to feed out during the winter months. And these farmers do not always use steamers as straw-cutters. It may be true that the best way to feed straw is to cut and steam it, yet few farmers who are able take the trouble to cut and steam straw.

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There seems to be but two remedies and they are but partial. One is to select the ripest and most perfect tubers from the best hills, and grow seed from them, rejecting from the product all the small and imperfect ones. This is my own practice, and from such seed plots I am careful to pick all flower-buds before they open. The other is to procure new varieties of undoubted excellence, and grow them as long as it is profitable.

THE PRINCE OF WALES AS A LANDLORD.—An old tenant of His Royal Highness writes to the Agricultural World:—"It may be said broadly that long leases are the prevailing custom of the estates. Every consideration is shown to the position and circumstances of the tenants in the renewal of their lease. An old tenant is never turned out to make room for another man who may be willing to out-offer him in the matter of rent, &c. I believe that I am not likely to be contradicted when I say that in this matter, as in many other benefits bestowed upon the tenants of the duchy, the personal influence and authority of His Royal Highness are distinctly perceptible, and that he keeps a watchful eye upon the well-being and prosperity of every farmer upon his estates. The conveniences afforded in the way of farm houses, barns, stabling, out-buildings, &c., are unusually complete in their character. The erections themselves throughout the estates are models of comfort and convenience—in many cases even of elegance. It is within my knowledge that thousands of pounds have been spent, and are still annually laid out, in order to keep up the high standard of excellence which has been attained in such matters and in effecting improvements—sometimes of a wholesale description—in order to keep pace with the times. The Prince's tenants are all permitted to exercise the privilege of shooting over their holdings."

SORE TEATS IN COWS.—When the teats of a cow are sore in any way, (having blisters or cracks in them,) it is well to wash the teats clean before milking, and have a vessel of water in reach, and often wet the teats while milking. This softens the skin. After milking apply butter and salt mixed, of about equal proportions in bulk. The salt cleanses the sores, and the butter keeps the skin soft. In a few days all are well. Never wet the teats with milk while milking.

THE BREEDING OF CATTLE, HORSES, SHEEP, &c., IN THE UNITED STATES.—Under the above heading, the New Orleans Picayune lately wrote: "There is a quiet kind of an improvement going on in the Southern States that out few people seem to fully realize. In numerous localities can be found, here and there, a man who is beginning to improve his breed of cattle, sheep, and hogs; others are attempting to raise their own horses and mules, and are bringing in better breeds of horses than we have generally had in these States. The merino sheep is beginning to attract attention in the Gulf States far more extensively than in former years. And fine stock of the merino, Southdown, and Cotswold breeds are sold a great deal cheaper than formerly. A good merino ram, formerly sold for \$75 or \$100; now they can be purchased for from \$25 to \$35. The Jersey, Alderney, Shorthorn and other breeds of cows are being introduced into the South more than ever. The improved breeds of hogs, particularly the Poland China, and Berkshire, are getting new holds in many parts of these States, such as they never had before. Improved chickens, geese, ducks, turkeys, &c., are on the increase."

PREFERENCE OF THOROUGHBREDS.—A writer in the A. J. C. C. Bulletin says:—"We have never known the Jersey bull to fail in stamping the characteristics of his race on his offspring from a native cow, at least in the second cross, and have now in mind a number of grades in which good breeders would find it difficult to detect evidence of any common blood."

But let a Jersey bull be bred to a Devon cow, and continue to cross her progeny with Jersey bulls, and in the fourth generation one need to be told what the animal is. Some modification in form may be observed, but the color of the Devon has not yielded a shade in a single hair. It has been Greek meeting Greek! The writer had such an one pointed out to him recently, whose owner proposes to continue the "mill" according to rules observed in previous rounds, and to let us know when either side throws up the sponge.

THE "HORNING" OF CATTLE.—An American paper recently described "the case of a brute who deliberately sawed off the horns of some Irish cattle received, the animals being of full age. The perpetrator was justly and heavily fined by the judge before whom the complaint was made." We regret to have to inform our contemporary that the cutting off the horns from the heads of bought-in one and two-year-old English and Irish cattle in the feeding districts of Perthshire, Forfarshire, and Kincardineshire, is the order of the day about this time of the year. Potatoes require a good deal of potash, and farmers cannot make a mistake in applying to the land on which they are grown either ashes or commercial fertilizers that contain a large per centage of potash.

HOW TO UTILIZE THE STRAW.

In mized husbandry, a farmer grows a variety of produce, and keeps all or nearly all the domestic animals. Nothing could be easier than feeding to suit the taste of his different animals. I know many old farmers who insist that their calves and colts must consume the straw. It is nothing but the most effectual starvation to restrict a colt or calf to a diet of straw. But some one asks what to do with the straw. It will not pay to sell it, it is too good; and there is too much of it for bedding. Why not feed it to young stock in preference to working horses, or fat cattle, or milch cows? I know that many of our well-to-do farmers reason in this way. Their horses are working, and must have the best hay and the plumpest oats. Beef cattle must be well fed, and must be of a kind that will not produce fat, and of course straw is not good for milch cows. Indeed, straw seem to be good for very little. An analysis of straw may show a considerable amount of nutritive matter, and yet when you come to force stock to subsist on a straw diet, the result is highly unsatisfactory. Still, straw is valuable, and many of our most successful farmers would be lost were it not for the quantity of straw they have to feed out during the winter months. And these farmers do not always use steamers as straw-cutters. It may be true that the best way to feed straw is to cut and steam it, yet few farmers who are able take the trouble to cut and steam straw.

DETERIORATION OF POTATOES.

A writer to an Agricultural Journal makes a curious observation relating to what he deems one of the causes of the deterioration of varieties of potatoes. He says:—"Many years ago I saw changes going on in the hills for which I could not account, and the very existence of which was stoutly denied by prominent cultivators, the changes being always ascribed by them to accidental mixing in handling. But I determined to find out for myself the cause, whatever it might be. I began by planting strong-growing varieties in alternate rows with others less strong, contriving to have both seasons at the same time. After two seasons the result began to appear in new and distinct varieties. In some instances entire hills would be changed; in others only a single eye in a tuber. And these changes extended to the time of ripening, the color of the vines, and their habits of growth and would be permanent. The first thing I learned was that the impregnation took place one year and affected only the buds or eyes, to be followed the next year by the changes in the tubers; and, with very few exceptions the quality of the variety thus produced is always inferior to that of the original. Without doubt, the laws that apply to particular varieties of vegetables, and the foreign substance enters into the circulation of the plant and deterioration is the natural result of the introduction of bad blood. This deterioration is taking place continually without the aid of man, and will take place in spite of him. Getting seed from a distance does not remedy the evil, for the cause exists universally.

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