THE AGRICULTURIST

Will be published every

SATURDAY by

ANDREW LIPSETT,

at the

OFFICE ON QUEEN STREET,

Opposite City Hall, F'ton, N. B.

Subscription, - $1.50, in advance.

☞ Should the supscription remain unpaid for 3 months from the time the first paper is sent to the subscriber, the price will be $2.00.

The Agriculturist.

A WEEKLY JOURNAL DEVOTED TO AGRICULTURE, LITERATURE, AND NEWS.

ANDREW LIPSETT, Publisher. "AGRICULTURE THE TRUE BASIS OF A NATION'S WEALTH." ANDREW ARCHER, Editor

VOL. 1. FREDERICTON, N. B., AUGUST 17, 1878. NO. 19.

Agriculture.

THE FARMER'S HOLIDAY SEASON.

The season of Agricultural Exhibitions, Cattle Shows, County and State Fairs is fast approaching; it lasts from the beginning of September until the end of October, and within that time, in different parts of this great continent, at different dates (to keep within limits) a hundred and fifty not counting local shows will be held. In some of the agricultural papers, a table is given—confessedly not full—of the shows to be held within the bounds of the Union, and the total is over a hundred. These to be held in the Dominion will make up the number given. In Masschusetts, one of the least of the States in area—thirty-two fairs will be held in September. It was less favored originally, as regards soil, than most of the other States, but its agriculturists by hard labor and scientific culture, have brought it up until it occupies the most prominent position. It is, it may be said, an argument in favor of holding frequent agricultural shows, when it is found that in the small but far advanced State of Massachusetts, many more of these exhibitions are held than in any other great State of the Union, or than in the West altogether. Their number and frequency are presumptive proofs that the farmers of the Bay State have found that they have a stimulating effect in improving both their modes of culture and the produce of them and their herds of cattle. The season may be called "the farmer's holiday," when the most anxious part of the year's trial is over, he feels at leisure to relax himself without losing sight of his pursuit; when he can leave his farm for a week and take a trip by wagon, rail or boat to the appointed centre of his district, state or county, where are displayed the culled results of the year's labor, and where he pits the choicest specimens of his own culture and breeding against those of all-comers; where he meets numerous acquaintances and friends, and makes more, with whom he compares notes on the work of the year, its trials, failures and successes; with whom he perhaps criticizes the judges awards, or from whom he receives the congratulations due to a taker of first prizes; where he possibly in course of interchange of ideas with his neighbors, or from his own keen observation of what he sees around him, he receives some suggestion which will remain in his mind and bear fruit in time, in easier culture, better produce and improved stock, and when he leaves, he feels invigorated for the next year's work, and determined that he will make a better show next time of holding. The farmer, of course, may spend his holiday in some other way than in improving his mind and catching new ideas. The accompaniments of the show may have more attractions for him than the show itself; he may see nothing in it but the opportunity of having a good time; he may have a mania for sport and trotting horses, and if races are part of the outside show, and he has a favorite to back he may verify the proverb, that "a fool and his money are soon parted;" he may fall among thieves and boon companions, and when he leaves for home, a sadder but not a wiser man, he will probably vent his discontent at shows and fairs in general, and swear that these same shows and cattle fair are frauds; that for the life of him he cannot see what good they do or how they benefit the farmer. But this an exceptional case. The true farmer recognizing the object for which these shows are held draws both profit and pleasure from his holiday.

CANADIAN BULLOCKS IN DUNDEE.—One week in July four Canadian bullocks were sold in one of the Dundee (Scotland) auction marts, and brought from $135 to $166 per head. They were the first lot of Canadian cattle ever held in Dundee.

Professor Shelburne, of the Agricultural College, Cirencaster, lecturing before a farmer's club in Birmingham in dairy farming, remarked that—

Milk is a most curious and interesting liquid. It is the only article of food which will sustain life for any lengthened period; it is the only article of food that contains in itself all the elements which are necessary to the support of the body; it is, at the same time, one of the most delicate and beautiful of nature's products, and, as such, it needs great care in treatment. The composition of milk pure from the cow, in the month of, say, July or August, is as follows:—

Water	87·25
Butter, pure fat	3·86
Casein (containing nitrogen 62)	3·28
Milk-sugar	3·28
Mineral matters	78
	100·00

TOPDRESSING MOWINGS.

The following article from the *New England Farmer*, will be found instructive and not unseasonable.

Is it profitable to topdress grass land at all with either chemical fertilizers or stable manure? The answer to this must vary according to the nature of the meadows, the kind of grass grown, and the value of the hay crop, compared with other productions of the farm. In some localities, as near cities where the land is devoted chiefly to market gardening, the hay crop takes a secondary position. After fields have been under cultivation for a long time and have received large quantities of strong animal manure, it is sometimes advisabe to seed down to grass, partly for the purpose of filing the soil with vegetable matter, and partly to utilize certain elements in the soil more economically than would be practicable under constant hoed crops. In such cases, it would certainly not pay to topdress the grass land, but as soon as two or three full cuttings have been removed, replough, and then follow with the usual garden crops. Squashes, cabbages and potatoes are thought by many to do much better on land recently in grass than on old cultivated fields. There are also meadows which are topdressed naturally by the overflow of rivers during winter and spring. We have seen such meadows that have produced undiminshed crops of hay for nearly a half century. Of course such lands would not pay for topdressing with stable manure, nor do we believe that it will often pay to topdress sandy, plain lands for producing grass. Indeed, sandy land is scarcely suited for grass culture under any conditions, but can be made to produce forage for animals with more profit, if sown to millet or planted to corn. The land best suited to a system of topdressing in that which is always moist and too rocky to be easily ploughed. This is natural grass land, and is better for that crop than for any other, unless it be wood or orcharding.

Our own experience in topdressing mowing land with stable manure has been quite limited, as we have very little moist land that cannot be easily ploughed. Some years ago, we made a large compost heap during the summer, gathering the material from the cattle-yard and hog pens, and, after shovelling it over several times and getting it fine, it was spread broadcast over a field of several acres, late in the autumn. In the moist portions of the field, the grass was much better on the following year, but where the ground was dry, we felt that both manure and labor were nearly all lost, as the crop was very slighly increased.

A few experiments were afterwards made in drawing green manure direct from the stables, and spreading on moist, grass land, immediately after removing the crop in July, following with a heavy bush, which pulverized the manure and beat it down close to the sod, and within the influence of dew and the natural moisture of the soil. The new crop came up through, and, in a few days, completely shaded and protected the topdressing from evaporation. Such experiments have always been highly successful.

Last winter we drew out green manure and spread it broadcast upon several inches of snow, as we had repeatedly done on ploughed fields, with excellent results, but, from some cause we are unable fully to understand, the crop of grass has not been increased anywhere near to the degree that the expense of the topdressing called for.

After looking these experiments over, we have come to the conclusion that no more barn yard manure will be used as a topdressing for mowing lands on our farm, except it be under fruit trees, where ploughing is impracticable. A better use of the manure can be made on the ploughed fields, while the topdressing can be done much more cheaply, and with less waste, by the use of the Stock bridge topdressing manures. There is a slight advantage in applying fine yard manure to grass just after the crop is removed, on account of the mulching effect of the manure. It shades the ground and *may* save the grass roots from being destroyed by the hot sun of July and August, but if it is applied for this purpose, it matters little how weak it may be. Clear sand, loam, straw or stable manure which has been largely *extended* by the use of these substances, will produce good effect.

A visitor at the farm once said to us when discussing this subject, that, if he were to practice topdressing for mowing fields, he should cart a great deal of dirt, and should "hill up" the grass stubble just as he would draw fresh earth around cultivated plants in the field or garden.

Probably no species of grass would be benefited more by topdressing immediately after haying, than timothy. This grass renews itself by new plants coming out from the side of the bulbs just as new onions come from the side of old onions. The bulbs of timothy are wholly above ground at all times, and connect with the soil by roots thrown down from the centre of the bottom of the bulb. The new plants draw their nourishment from the old bulbs until they have thrown down roots of their own into the soil beneath. When the weather is very dry, this is a trying time for a timothy sod, especially when the grass has been cut early and before the bulbs had become fully matured, which is about the time the plant is in full bloom.

Taking all these facts into consideration, it will be seen that the question whether it will pay to topdress grass land must be answered in accordance with the conditions attending each case. It will sometimes pay well, while it may prove an almost total loss of both manure and labor.

MANAGING TIMOTHY MEADOWS.

Timothy differs from other grasses, and, therefore, require different management, which, however, it seldom gets, as the difference is not sufficiently known. Hence it has not the success which rightfully belongs to it; and it would probably be little grown were it not that it is adapted to our moist clays where, with the indifferent culture it receives, it grows better than most if not all other grasses.

It is my intention, after a long acquaintance with this grass, to show wherein it differs from the other grasses, and how to adapt the treatment accordingly. Timothy is a superior grass and extensively grown, usually in connection with clover, the clover being a good preparation of the land for the grass which immediately puts forward after the clover has disappeared. The difficulty is that we are in the habit of growing too much clover in proportion to the timothy; the clover is made more or less heavy by the application of plaster, thus having a tendency to keep back and not unfrequently smother the grass. This is now getting to be remedied by sowing less clover and more timothy, usually two parts of timothy to one of clover. This favors the grass, so that when the clover dissapears the timothy will have a good set. Where the proportion of timothy to clover is large, say three to one, as is also practised by some, there will be some grass appear with the clover, making a mixed hay which I believe is generally prefered. If cut when the clover (the medium kind) is in bloom, the timothy is heading out; is green and tender, making one of the best feeds for cows and young stock, giving a chance for the second growth at once to push forward, and with favorble weather grow another crop equal, or nearly equal, to to the first. I have known it to surpass the first.

Timothy is ranked amongst our most nutritious grasses, and is capable of a heavier growth than is usually supposed, growing under favorable circumstances taller than almost any of the grasses. I have known whole fields in Missouri grow to the height of five or six feet, the soil (a pulverized clay) being particularly suited to this grass. Our clay in this section is also favorable, though less so, being coarser and less equally distributed, and also less rich. It is this last point that more particularly engages our attention. By thorough tillage and mixing of the soil, our clay land can be greatly benefitted for timothy. But most of all it wants manure. Dairying and the growing of corn and clover increases the fertility, also the texture. What is needed is something stimulate and sustain the crop—not necessarily the usual stimulating commercial fertilizers, (which are good in their place, and may even in some cases be better than barnyard manure,) but a general manure, having all the plant properties, especially the leading ones,—nitrogen and the phosphates. This we get in stable manure, where the fluids, especially the urine, are all saved, and is best done by some fine absorbent. This, applied liberally, has an immediate and a most gratifying effect, pushing out additional shoots from each bulb instead of the one or two, so that the stools seem like the tussocks of orchard grass. Being near together, they form a thick, close sod, and a stand to correspond, both in height and in density. From two to three tons per cutting can thus be raised from an acre.

This is the best condition of timothy with us, and is but rarely reached, because we do not take the necessary pains with our land, nor save all (especially the better part—the urine) our manure. There are exceptional cases—sometimes accidental, sometimes designed. But a revolution can be wrought in our timothy culture if we only carefully prepare our land and enrich it. The time of applying the manure is important. It is particularly so with grass, but more particularly with timothy, which has its bulb and roots exposed—the bulb naked to the weather, and roots short (compared with other grasses), and therefore near the surface, subject to the changes and severity of the weather, but especialy the freezing and thawing in the spring, which have a tendency to lift it, and sometimes throw it out, in wet places. The necessity of protection is therefore evident. It is hence that early fall manuring has found favor, and is largely practised.

There is one thing in this connection that needs attention directed to it, and I find it unmistakably of special importance—it is the stimulus which the grass receives from the manure which acts in sustaining it during the winter. This may be seen wherever the ground is rich, or has been manured, the grass in the spring being greener and better preserved than the rest that has not received that attention. The vitality is increased by the enrichment, enabling the plant to withstand the cold the better. The same effect is found with strawberry plants and winter grain, which are all sustained by this manuring, vitalizing principle. Trees, shrubs and vines undoubtedly are benifitted in the same way, only the manure is not to be applied so early in the fall, nor cultivation continued so late in the season, pushing the growth beyond the ripening period of the wood.

Where the usual single and late cutting of timothy occurs, an immediate dressing of manure will protect both from the sun and the effects of winter. It is not, however, a convenient time to draw out the manure, the work then being crowding. Where two crops are taken, the right time for applying will be after the last cutting, giving chance for starting and invigorating the fall growth, which growth should never be fed down, but permitted, in connection with the manure, to form a protection. It is this kind of fall treatment of our timothy meadows that is needed. Then they will thicken and continue almost indefinitely. I have known fields for many years—one on the old homestead thirteen years—highly productive each year, and when turned down yielding the heaviest crops of grain. I hope farmers will give more attention to the subject, and not lose sight of the fact that short roots differ from other grasses; and when these are left exposed and unaided our timothy meadows soon run out.—*Country Gentleman.*

DECEPTION A FINE ART.

The recent high-priced sale in New York of a large number of imported Jerseys which were less remarkable for the excellence of their escutcheons than for the high art with which they were prepared for exhibition, may suggest a caution. The shaving of tails, the clipping or singeing of coats, the screwing, sawing, filing, and oiling of horns, may be arts all innocent enough. No intelligent breeder can be deceived by a rat-tail. Shampooing may cleanse the hide, and thorough grooming may make cattle as much more attractive as it does horses. The art of dressing man or beast is, indeed, a fine art. Still, dressing and breeding are two quite different things in more senses than one. The art of dressing aims more or less at concealing defects, while that of breeding aims at having none to conceal. The former makes a poor substitute for the latter, but may be used in subordination to it, and is apt to be the more advantageous the less it is relied upon.

Another caution of still greater importance, and which should never be allowed to pass out of any Jersey breeder's mind, is not to bring cattle up to show condition. The wish to have one's cattle look their best may be both natural and proper; but the best condition for a Jersey is very different from the best condition for many other breeds, and especially for the beef breeds, like the Shorthorn, for example. The butter Jersey, par excellence, is the cow which diverts the fat of food from her ribs to her udder. It is the one which declines to take on flesh while occupied with the production of butter globules. Therefore, while Jerseys never should be allowed to fall below good thrifty store condition, the wise and prudent breeder will always bear in mind that the point of fleshiness at which his cattle are pleasing to his eye, at which they elicit the praise of the visitor, at which they meet the views of the purchaser, at which they carry off the ribbons of the judges and the plaudits of the ring, is precisely the point of danger in a breeding herd. He is sailing, with a spanking breeze, close upon the rocks. These hidden rocks are, falling off in milk and butter capacity, parturition fever, garget, shy-breeding, abortion. The cattle are in imminent danger of being fitted to make a good piece of beef when the owner shall have no longer any use for them. The risk, too, is the greater, because breeders are apt to impose on themselves in this matter of the good looks of their herds. If they know what the risk is, they also expect to escape it. But public sentiment rather runs against them, inasmuch as men generally praise cattle that are in high condition, and are slow to appreciate the merits of lean Jerseys. It is in vain that judges at fairs are cautioned against giving prizes to cattle carying too much flesh for breeding purposes. The bias of both judges and exhibitors is in favor of having bones well covered and coats shining. In England so general is the high feeding of all kinds of improved cattle, and so strong is the public belief in the survival and superiority of the fattest, that the few owners of herds who are devoted to breeding for breeding's sake are compelled to retire from the exhibition ring. But the popular current continues to carry almost everything with it. The Short horn zealot blows up the hollows of his show-beast with air; and the Jersey fancier is bringing year after year the "deer-like Alderney" more and more into the shape of the fashionable, flesh carrying breeds of cattle.

HARVESTING BARLEY.

Barley is an unpleasant crop to handle, and probably the dread of its sharp beards and irritating dust deters many farmers from sowing it. The crop is also extremely liable to injury while harvesting. A rain which merely stains barley detracts 10 to 20 per cent. from its marketable value. This is especially true of six-rowed barley, which is used in making pale ales, and needs to be bright and free from stain. The six-rowed variety malts much more readily than the two-rowed, and a heavy rain while down, if continued one or two days, will start the sprout, and make it worth nothing except for feed. This has been the case with a great deal of six-rowed barley the last two or three years of low prices. As I sow this barley, I have studied the best mode of curing it quickly, and with least liability to injury.

Promising that the barley should be free from weeds, especially thistles, it should be cut just as soon as three-fourths of the heads have turned yellow, I like to select a time when "Old Probabilities" promises fair weather, but after the barley is ripe, it is nearly as bad to have it wet while standing as when down. A long rain will stain ripe six-rowed barley while standing. I have had a heavy rain on barley that was cut which dried out so quickly as to leave scarcely any stain. The secret is in leaving the barley always as thin after cutting as possible. It will dry out more quickly, and be sooner ready for drawing to the barn. The old practice was to cut with a reaper and leave barley in bundles the same as wheat. These were left two, three or four days to dry through, carefully gathered together in cocks, left over night, and then drawn to the barn. It was indeed a wonder that we ever got barley in a continuous swath the same as a reaper. If free from thistles and weeds, the barley, lying thinly on the ground will be ready to draw after one day's bright sun. I rake in winrows with a wire tooth horse-rake, put in cocks and drawn to the barn. The barley is always spread thinly on the ground or in cocks, until it is gathered in. Either position is favourable for avoiding injury by rain. When spread thinly, it dries out after a shower about as quickly on the ground, as if standing. In the cock the barley will shed rain so that only the top will be wet, and this should be spread thinly as soon as settled fine weather returns.

Farmers who have no reaper can cut barley nearly as well with a mower. In fact, this method was invented by them. They had such good success in having barley thinly spread that the method was followed with the reaper. The disadvantage of a mower is that the cut grain is not thrown one side so the horses and machine run over it in making the next swath. It also does not leave a path between the swaths in which the horse can walk while raking. There is some loss by shelling while raking together but this is unavoidable. It is less by raking just at night or before the dew is fairly off in the morning. It is very important that barley ground should be perfectly smooth. I always roll it after sowing, both for convenience in cutting and to press down the stones and lumps, so that the rake will not gather them with the grain. Barley this year is badly crinkled by the Hessian fly, and unless the ground has been rolled it will be almost impossible to gather it all.

The loss by shelling is not more by this method than by any other, and the barley is got in the barn in better order than by any other. I do not mind the little barley that is shelled. The ground is at once plowed for wheat, and the barley is worth as much for green manure, to be cultivated in next month, as the market price has been for a year or two past. I find barley the very best crop to precede wheat, because I can plow the stubble a month earlier than after oats; and I prefer the six-rowed barley for one reason—because it is a week or ten days earlier than the two-rowed. —*Cor. N. Y. Paper.*

JERSEYS FOR AMERICA.—Mr George Jackson, of the firm of Churchman & Jackson, of Beech Grove farm, Indianapolis, Ind., sailed from New York for England on the 2nd inst., for the purpose of procuring the best herd of Jerseys that money will buy. This importation will prove a valuable acquisition to the enterprising breeders of the Hoosier State.

THE FARM KITCHEN.

The following picture of the "Farm Kitchen" of New England, in "ye olden time," will, no doubt be appreciated, by many an old New Brunswick Farmer.

This room used to be "the heart of the house." It was the only large room. The family lived it. There all meals were taken, guests entertained, and merry-makings held. At one end was the great fire-place, where back-log and fore-log blazed and burned. On the crane, hook suspended, hung the big iron pot, "bubbling and seething." An open dresser held the array of tin, pewter and crockery ware. Old-fashioned splint-bottomed chairs, and a large solid pine table, formed the scanty, yet sufficient stock of furniture. A tall house-clock ticked off the hours with solemn voice; the big wheel and little wheel, one for wool and the other for flax, occupied a far-off corner; poles overhead were garnished with alices of pumpkin and strings of dried apples; and the long-barrelled flint-lock hung in company with powder-horn and bullet pouch across the chimney. What a change has come over all this! The great fire-place has fallen into disuse. Most likely it has been torn down, chimney, oven and all, to make room for the more convenient cooking-stove The woodwork is painted; the smoke-stained whitewash covered with figured wall paper; handirons, crane and pot-hook have been sold for old iron; a prime, close cupboard has taken the place of the old open dresser; big and little wheel "relics of an almost lost and forgotten handicraft, have long since been banished to the garrot. There too has gone the ancient clock, and a short, dapper time-piece, on whose lower half is a landscape of startling colors, hurries the hours away with swift, loud tick. Everything has undergone some change; even the old gun has had its flint-lock altered to percusion." The old-time farm kitchen, with its homely interior, was "far more picturesque than any to be found in modern farm-houses." We miss especially, and regret most, the "great fire place." What a centre of warmth and source of cheerfulness it was! It was a good cooking apparatus too. "Those who remember old-time cookery aver that in these degenerate days, there are no Johnny-cakes so sweet as those our grandmothers baked on a board on the earth, no roast meat so juicy as those which slowly turned on spits before the open fire, or any brown bread, or baked beans, to compare with those which the old brick ovens and bake kettles gave forth."

FEEDING FOWLS PROPERLY.—Most people take for granted that they, at least, "know how to feed chickens," and almost everybody has a different way of doing it. My father used to say "a boy who eats well will work well," and fowls must be taught to eat well—not be over-fed, however, or crammed, but provided with a variety of food to such an extent as to create an appetite for something continually. A laying hen is a perfect mill, and while her usefulness lasts, should always be kept grinding! I do not mean by that to keep a box of food before her continually, for what boy would care very much for pumpkin pie if a huge pie was kept at his side continually? The point to be gained is to keep the fowl eating, and keep her hungry, too; hence the necessity of variety. Let corn, oats, cracked corn, wheat screenings, meal pudding, rye, soaked crackers, buckwheat, &c., follow each other in succession, and for side dishes and dessert, supply chopped bones (if directly from the butcher, with some meat on them, so much the better), and, if confined, plenty of green food; if near the water pounded shell-fish (shells and all) and crabs chopped fine. By so doing, your fowls are not required to eat the same thing more than twice each week and the result is, they always have good appetites, thrive well, and the grand result is at once achieved—plenty of eggs and healthy fowls!

A novel plan for freeing grain from vermin is recommended in a foreign journal. It advises putting a living crab into the grain heap so that it can not get out. The worms attact the crab and enter the shell. In twenty-four hours the body may be taken out and the shell will be found to contain worms instead of crab's meat. The entire crab is thrown into the fire and and a fresh one put in the grain, until the vermin is eradicated.

A CELEBRATED WOOL PRODUCING RAM.—Mr. A. Taylor, of Romeo, N. Y., whose clip this season amounted to 2783 pounds, sheared thirty-seven pounds from the ram "Addison," now 14 years old. The first fleece of this sheep weighed twenty pounds, and he has during his life made thirty pounds in a single season.

CARE OF HIGH-CONDITIONED COWS.

At this season it is timely to warn the owners of cows in high condition, or of heavy milkers, to guard carefully against plethora and suppression of the natural secretions just after calving. Many of the best cattle in the land, those on which the hope of the improvement of our herds must mainly rest, are lost to their owners and to the country for want of a little care at this critical period. If a fully developed cow is fleshy, full of blood, and thriving at the period of calving, and if she passes through the ordeal easily, with little expenditure of effort or of blood, she should be placed on the barest possible feeding for a week after parturition; and it were well if the same restriction should be maintained for five or six days before that act as well. A very limited supply of hay, sprinkled or scalded, may be given during this period, but all grain and roots should be withheld. If the cow is already at grass, she should be taken up until six days after calving. If the bowels are not already really loose, a pound of Glauber salts should be given as soon as the act of parturition has been accomplished, and the udder should be stripped clean three times a day during the next critical week. The cow should be alike protected from excessive heat of the sun, by shady corners, and from cold, chilling draughts, winds, and rains; also from a damp bed, and from close, impure air. By the end of the first week the danger is virtually over, and the cow may be gradually put upon the most nourishing diet, and the secretion of milk stimulated as far as may be desired.—*National Live Stock Journal.*

OUR NEW WAY OF BUTTER-MAKING.—From an English butter-maker, recently from the "Mother Country," we have learned some new ideas in regard to butter-making, and after experimenting under the new plan some two months or more, we feel confident to say the new plan is worth a fair trial by any one keeping from one to three cows, for a summer dairy, as we are confident butter made after this plan has a sweeter flavor and will keep longer than when made after the old plan. The method as practiced of late is as follows:

After the milk has stood twelve hours, strained and set in the usual way, we set the pan containing the milk over hot water and let it come to a scalding heat. Then it is set away and stands twelve or eighteen hours longer before skimming. The butter comes very quickly; the cream only needs a little stirring. At last our butter comes in from one to three minutes. I stir the cream in a stone jar every other morning. From twelve pounds of milk per milking we make one and a half pounds of butter per day, on an average. The cream should be taken off with as little milk as possiblbe dipped with it; as then the cream keeps sweet and pure for a greater length of time, also causing the butter to come sooner when stirred. There will be but little buttermilk—sometimes only what can be rinsed out with water.

We find that butter made from this "cooked cream," as it is termed in England, can be washed without injury. In fact, it requires washing to perfect its quality.

It is a matter that might pay investigation, to find whether it would pay to get vats sufficient in size to hold each milking of the dairy, and have them so constructed as to be heated at will; then, when the milk has stood twelve hours, bring it to scalding heat—say 190 degrees—treating as described heretofore. The butter made after the manner herein described has a different taste from that made from raw cream; but with usage the taste is soon educated to prefer butter made from the cooked cream.—*Ohio Farmer.*

HEN MANURE.—A contemporary estimates the value of hen manure from grain-fed fowls at $2 per 100 lbs., the valuable constituents being nitrogen, phosphoric acid, and potash, and says it may be fairly compared with ammonited superphosphates, which it resembles in composition, with the addition of a little potash. Its comparison with Peruvian guano is not warranted, since, though both are the excrements of birds, their food is entirely different, being in one case fish, and in the other grain.

MR. O. S. BLISS, of Georgia, Vt., asserts in the *Country Gentleman* that horses "become, after a while, almost passionately fond," of skimmed milk; he has known a few cases in which it has been thus utilized "with great economy," and "a pail of it three times a day will keep a work-horse in better condition than the average ration of four quarts of oats."

THE CROPS IN AMERICA.—The crop reports from various parts of the United States confirm the predictions made early in the season that the harvests this year will be enormously large. In the Northwest the increase of the grain yield will, it is estimated, be from 15 to 20 per cent. over that of last year. In a few localities rust has come upon the grain, but too late to seriously affect the harvests. In Minnesota corn is backward on account of cold and wet, and potatoes suffer slightly from the Colorado bug. In Wisconsin the acreage of grain is considerably more than that of last year. In Ohio the acreage of wheat sown is about 33 per cent. more than that of 1877, and the increase over any previous yield will be at least 25 per cent. The average wheat crop in that State for the last eighteen years has been 22,000,000, bushels. This year 30,000,000 bushels are expected. Last year 100,000 bushels of corn were raised, which will probably not be excelled this season. There is an increase of acreage in potatoes, which it is estimated, will yield 300 bushels to the acre.

The potato-bug having destroyed a large percentage of the potato-fields, amounting in the aggregate to several thousand acres within fifty miles of this city would it not be well for the farmers to consider how they may best make up for the very serious loss which they have sustained. As these potato-fields are generally in fine condition for producing any crop for which the bugs have a dislike, they might be planted with white turnips, even as late as the first of August, with fair prospects of a good crop. As the drouth has caused the growth of straw to be much shorter than usual, and the lack of pasturage is causing an unexpected consumption of hay at present, a crop of turnips in the fall would be a welcome addition to the supply of cattle-feed laid up for the coming winter, which promises to be a particularly hard one, should it turn out as cold as many anticipate, while fodder is not by any means too plentiful. The dry weather has enabled farmers to save their hay much more speedily than is generally the case, so they may find time to put in a few acres of turnips in places where the potatoes have been destroyed by the insatiable beetles. Even were these vacant fields sown with oats, by the middle of October they would present a most tempting repast for live stock which were beginning to feel the effects of short pasturage. This would give them a good start to begin the winter with.—*Montreal Witness.*

THE HEART-BEATS OF A LIFETIME.—According to a French medical journal, Dr. Guyot, after consulting the best authorities on the subject, and making the necessary calculations, has determined that the number of pulsations during the different ages of life are as follows: During the first year, 63 millions in round numbers; during the first two years, 120 millions; during the first eight years, 435 millions; during the first twelve years, 614 millions: during the first fourteen years, 698 millions; during the first thirty-six years, (giving the figures in full,) 1,229,904,900; during a life of fifty years, 1,928,160,000; during a life of sixty years, 2,269,800,000; and during a life of eighty years, 3,007,040,000.—*Boston Journal of Chemistry.*

A NEW AGRICULTURAL PEST.—Considerable excitement has been caused in the district of Tekuch, near the village of Funder Roumania, by the sudden appearance of a species of mole, yellowish in colour, 20 centimetres in length and 8 in circumference, of a snake-like appearance, which has already destroyed 120 acres of wheat, part of the ground being cleared so effectually that it is impossible to tell what species of grain had been sown thereon. These animals disappear during the daytime in holes dug in the earth, and come out at night to commence their depredations. The oldest inhabitant of the district has never seen anything of the kind before.

A POWERFUL PLOUGH.—There has just been constructed at La Crosse, Wisconsin, an immense plough, the parts of which weigh as follows:—Share, 392 lbs.; mould board, 180 lbs.; beam, 900 lbs.; coulter and clasp, 180 lbs.; clevis, 60 lbs.; standard 134 lbs. The size of the beam is 16½ feet and 10 by 17 inches; standard, 10 by 74½ inches; mould board, 8 feet by 26 inches; share, 5½ feet by 12 inches. The plough is for the Chicago, Milwaukee, and St. Paul Railroad Company, will cut a furrow 37 inches wide, is intended for ditching, and will be drawn by a locomotive.

CLOVER SEED FROM CANADA.—Thirty-seven car loads of clover seeds, which means about 13,000 bushels, costing some $50,000 are said to have been shipped to England and Germany during March and April by Mr. Henry, of Chatham, Canada.