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RURAL NOTES.

THE "whole art of riding" is embodied in the following lines, which are credited to *John Bull* :

"Your head and your heart keep up,
Your hands and your heels keep down,
Your legs keep close to your horse's sides,
And your elbows close to your own."

SINCE Parisians learned the merits of horse flesh as an article of food during the siege, hippogamy has made steady progress in the French capital. In 1875 the butchers disposed of 7,000 horses, in 1880 of 9,000, and in 1881 of 9,800. Last year the supply of meat was further increased by the carcasses of 400 asses and mules.

An exchange gives this programme of work for spare moments and rainy days:—"Clean, polish, and oil tools; repair any broken tools; clean and oil harness; shell corn; put all tools neatly in place; sweep floors of barns and outhouses; grind hoes and spades; sprout and assort potatoes; keep cellars sweet and clean." It would be a good idea to "write it large," and post it up in some conspicuous place.

MR. G. W. WHITE, of Eltingville, N. Y., says he "can show as good ensilage as there is in the country, and as poor stock." This, however, proves nothing, except that ensilage alone is not a sufficient diet. The same might be said of turnips, or indeed, of almost any other single article of cattle food except grass. Even meal alone, however rich, would not keep stock in a healthy, thriving condition. Some things are good in a mix that are not worth much alone.

PROFESSOR ARNOLD has been giving his opinion concerning the relative value of barley and corn for production of butter, cheese, and milk. In brief it is, that corn is far preferable to barley when the object is to produce the most and the best butter, but for obtaining milk for cheese, or for selling milk by measure, barley is more profitable. There is often wanted a way to dispose of barley that is too much off colour to bring a good price in the market, and here it is.

In 1880, two French army officers were commissioned by their Government to visit Canada and the United States, to investigate and report on the qualities possessed by the horses of the American continent, with a view to their suitability for military purposes. Their report has been recently published, and that part of it which relates to Canadian horses is so complimentary to our breeders, that we shall try to make room for it in the next issue of the *RURAL CANADIAN*.

THE *Breeder's Gazette* says:—"Mr. James I. Davidson, the well-known importer and breeder

of Shorthorns, of Balsam, Ont., Can., recently sold five imported and three home-bred females and the bull Baron Victor to Mr. J. H. Kissinger, of Kissinger Station, Mo. This, we believe, makes thirty head selected within a short period by Mr. Kissinger from this well-known Cruikshank herd. Four head were also sold to L. Palmer, Sturgeon, Mo., at the same time. Mr. P. also has quite a number of animals of Mr. Davidson's stock.

THE *Canadian Farmer and Grange Record* has been collecting reports of the crop prospects throughout Ontario. "A conjunct" view of them leads to the opinion that winter wheat is not in more than average condition. The frosty nights and bright warm days of April have damaged it considerably. A droughty spring is also unfavourable. Still, a warm rain, when it comes, will doubtless work a great change for the better. Farmers generally "prepare for the worst" by evil prophecies. It would be well if they would also hope for the best.

Lippincott's Magazine for May contains the following exquisite little rural poem, which is credited to "Howard Glyndon":—

A VIOLET IN THE GRASS.

Only a violet in the grass,
Upon the border of the field;
And yet I stoop, and would not pass
For all my bounteous acres yield.

I bless the kindly plough that left
This little silent friend to me,
Of all its sister flowers bereft,
Like one cut off from sympathy.

Where yonder dark-brown belt of trees
Breaks on the far blue mountain-line,
What throngs of violets on the breeze
Give out a fragrance rare and fine!

But this one, trembling here alone,
Dropped like a tender thought from God,
Needs none to make its message known
Before I pluck it from the sod,

And hide it on the hard-tryed heart,
Too tired by far for aught of glee,
That yet goes singing soft apart,
" 'Twas meant for me! 'twas meant for me! "

FARMERS! look out for swindlers. Put your names to no documents which you do not fully understand. Trust no stranger on a verbal agreement. Have everything in black and white without possibility of imposition. Here is a new trick which has been tried successfully in the Unadilla Valley, New York: An agent comes along, asks permission to set up a mill on the premises of the victim for exhibition, and promises that if three mills are sold the owner of the exhibition ground will receive one. The agent then asks the signature to a contract to this effect. A few days later four feed mills at \$60 each are consigned to the signer of the contract, and a note bearing the name of the victim for \$240 is presented for pay-

ment. A number have been swindled in this manner.

AMONG other items of information sought by the *Canadian Farmer and Grange Record*, bees and how they wintered were comprised. Where kept, the report is that they have wintered well, and come out strong this spring. But it is noticeable, that many informants write, "No bees in this township." "No bees kept." This implies waste of honied sweetness that, if gathered, would add largely to individual and national wealth. Every farm should have, at least, a few stands of bees. But, in this country especially, it requires knowledge and skill to manage bees, and for want of these, many who have essayed to keep them have given it up. The man who does not believe in book-farming had better never touch bees, for they must be handled by the book, or they will assuredly fail.

THE *Brockville Recorder* says:—"Just at present the question seriously agitating the mind of the farmer in this portion of Ontario is how and where he is going to obtain the necessary amount of labour to harvest his crops. In many districts whole farms have been left tenantless by the insane expectation of the occupiers to suddenly become rich in Manitoba, while in nearly all localities the floating population—that is, those who depend upon the well-to-do farmers for employment—have left body and breeches. In conversation last week with an old farmer of this township, he informed us that his four sons had joined the army of emigrants, and he was now left with a farm of 160 acres on his hands, which was practically valueless, as he was unable to work it himself, and not a single labouring man could be hired in the neighbourhood.

HEAR both sides, and then judge. A Philadelphia dairyman says, in a letter to a friend, which appears in the last issue of the *Country Gentleman*:—"Two of my dairymen have fed ensilage to their herds the past winter. The results have been so thoroughly satisfactory both to them and to myself that I wish to ask thy thoughtful attention to the subject, with a hope that thou wilt continue to grow the fodder, construct a silo, and be provided with a supply of ensilage next winter. These dairymen have pronounced ensilage an economical and desirable food, and I pronounce ensilage-fed milk the best and most desirable winter milk I have seen. Our experience the past winter has been that we could not without difficulty change our customers from ensilage-fed milk to the milk of cows fed with the ordinary winter feed. They have rebelled at once. The most striking feature is the grass-like appearance of the milk, but I believe the quality also is improved by the feeding of ensilage."

FARM AND FIELD.

PROFESSOR BROWN ON ROOT CULTURE,
THISTLE KILLING, AND SUMMER-FALLOWING.

Professor Brown is, in our opinion, one of the most accomplished agriculturists of the age. As teacher of scientific and practical agriculture, and farm superintendent in our Farmers' College, he is emphatically "the right man in the right place." He has already done wonders in the reclamation and improvement of the Model Farm. His reports are, all of them, replete with valuable instruction, and the last is a rich mine of thought and fact. We could easily enrich every number of the RURAL CANADIAN with useful extracts, until the next report issues from his fertile brain and facile pen. On most agricultural subjects we are content to sit at his feet in the attitude of humble discipleship, and to accept his teachings as those of an oracle. It is a treat to spend a few hours with him on the domain he manages so well, and we only wish we could do it oftener. Nevertheless, there are some points on which we differ, and in regard to which we occasionally break a friendly lance. On these points the Professor is strictly orthodox, and we are heterodox. Nevertheless, our consolation is, that in agriculture as in theology, the heterodoxy of to-day is the orthodoxy of to-morrow, and we do not despair of making a convert some day of the doughty Professor. The main points of agricultural theory and practice on which we disagree are set forth in the heading of this article; and as the Professor has expressed himself pretty freely upon them in his last report, we propose to have a little tussle with him in the spirit described by the author of "The Newcastle Apothecary," which we believe should always pervade controversy, though it is too often wanting—

"Who first shake hands before they box,
Then give each other plaguy knocks,
With all the love and kindness of a brother."

Professor Brown says on page 148 of his last report:—

"I am unable to understand how any soil can be maintained in the highest state of fertility without a division under root cultivation. We know the value and importance of a division under cultivated corn; what a bare fallow, or rest, means, and what clover can do; but no form of thorough cultivation, cleaning, manuring and surface rest, is so reliable as by turnips and mangolds. This is certainly no new statement to the Canadian farmer, but in many cases it is a doubted one, and entirely denied in others. What is usually implied in the raising of a root crop?

Fall manuring (farm-yard).
Fall ploughing.
Spring ploughing.
Grubbing.
Harrowing.
Rolling.
Harrowing.
Rolling.
Special manures.
Drilling.
Horse hoeing.
Hand hoeing.
Horse hoeing.
Hand hoeing.

"This appears formidable, and it certainly means no play. It means a first-class fallow and the securing of twenty tons per acre of a material that converts the winter months into a soiling with green fodder,—freshening all animal life, enabling the farmer to use up much roughness of other materials that would otherwise become less valuable, adding immensely to the manure pile and cheapening keep sixty per cent. I do not go

the length of those who argue that were no crops obtained—that is, in the event of turnips being a failure—all the attendant operations as above specified more than repay the cost; but I do affirm, after twenty-two years' practical experience, that a stock farm is a bare, miserable affair without roots.

"Thus, then, from the unpropitious conditions of 1875, our field has become, with one exception, a cropping subject of high value. That exception is *thistles*. I have to confess to being unable, in every example, to eradicate this enemy by root cultivation. Much has been said about thistles on this farm. Do I not say enough for the management when I now affirm that comparatively no thistle has been allowed to mature its seed during the past six years, and that they are out over three and four times a season? We have had to take to bare summer-fallowing in the worst cases."

We make the following extracts from other parts of the report, so as to have the whole case fairly stated:—

"After a turnip crop, that, with its assumed thorough manuring and cultivation, backed by drainage, is considered to be one of the best restorers of fertility and the holder of a rich surface, we laid down to grass (timothy and clovers), stealing a crop of barley as usual—barley, because less exhaustive and less destructive by shade than other cereals. There are various opinions on this important question of what, if any, crop should be taken the year of grass seeding. The best theory says no crop; but all the best practice steps in and shows results fully justifying this sort of double annual production."

"Field No. 2 has been ploughed four times to check thistles. No. 4 was drained to a considerable extent, loose stones and blasted stones removed, and an old snake fence, with its years of accumulated dirt, thoroughly cleaned. No. 5 was bare fallowed by four ploughings, fast stones blasted and removed. No. 6 has been cleaned of stones and stumps, and ploughed four times as a bare fallow."

Now, first as to root culture. Formidable as is the Professor's account of the cost of a root crop, he does not state it all. He stops at the "hand-hoeing." After that there is the pulling, hauling, pitting or cellaring, carrying and cutting. Sure enough, all this "means no play." In our view, it means no profit. When, after all this toil and trouble, the product is brought to the nose of the animal, a feast is provided which consists of 90 per cent. water, and only 10 per cent. of solid nutriment. Now, we affirm that 90 per cent. of water and 10 per cent. of food can be set before the animal far more cheaply than in the form of turnips and mangolds. We hold that, both in summer and winter, cattle should have constant access to water, that they may take it, not in wholesale drinks as man usually compels them to do, but in frequent sips as nature inclines them. Of course this implies what is, unfortunately, lacking on the generality of farms, but ought most certainly to be present, either naturally or artificially, on a model farm—a plentiful and ubiquitous water supply. Given such a supply, and we maintain that good, well-cured clover hay, with the addition of a little meal, can be furnished far more cheaply than a diet of roots, with the necessary addition of straw, hay, corn-stalks, or other coarse fodder.

There is another objection which especially applies to the turnip crop. We do not know if it lies against mangolds. It is undoubtedly exhaustive to the land. There is a mysterious loss of fertilizing matter somewhere and somehow. The turnips and the succeeding crop or crops of grain do not square the account with the manure applied. Farms that are largely and regularly

cropped with turnips do not improve in fertility to the extent they ought in view of the dung and tillage given them; and be it remembered that "tillage is manure." We have a theory, and we wish Professor Pantou would put it to a careful, scientific test, that while clover, in some as yet unexplained way, attracts and fixes ammonia, the turnip unlooks and scatters it in some way equally inexplicable. However it may be accounted for, there is a leakage and waste of manurial richness resultant from turnip-growing.

We believe that while turnips are a useful and profitable crop in Britain, where the climate is moist and cool, they are not so well adapted to this country, where summer drought and a hot sun cause the broad leaves to exhale, instead of absorbing, ammonia. Moreover, there is less handling of a turnip crop in Britain than here. The roots are largely consumed on the field where they grow. The crop is thus returned to the soil that produced it, whereas we feed it in the stall, and cart the manure made from it to another field.

"Thistle-killing" and "summer-fallowing" may be discussed together, with the preliminary remark that they have a close relation with root culture, as will be seen in the course of the argument. Thistles "out over three or four times in a season." "We have had to take to bare summer-fallowing in the worst cases." No. 2 "ploughed four times to check thistles." No. 5, "bare-fallowed by four ploughings." No. 6, "ploughed four times as a bare fallow."

Now, we affirm that all this is "Love's labour lost," and before all the thistles are eradicated from the Model Farm, we put in a humble petition to the Professor, that, amid his multifarious and valuable experiments, he will try this one, in the results of which we have unbounded confidence, and the success of which would bring vast richness to the farms and farmers of Ontario. Take a thistley field, give it a good fall ploughing, as early in the spring as possible, harrow it down, and sow clover on it, according to what the Professor admits to be the best theory, viz., *no other crop with it*. Or, if the nature of the soil admits of it, thoroughly prepare the land in the fall by both ploughing and harrowing. On this plan the clover seed can be sown "on the last snow," and will get an earlier start. Just before the thistles bloom, run the mower over the field. The clover will then get the start of the thistles, and smother them down. Two seasons of this process, the life-time of the clover plant, will eradicate the thistles, give cuttings of clover to pay for the labour and use of the land, and leave the field in a clean, rich condition, far ahead of any bare fallow "ploughed four" or forty times.

While the Professor is trying this experiment, we could wish that every farmer who reads this article would "go and do likewise." We shall cheerfully give one whole number of the RURAL CANADIAN, if necessary, to report the results.

The Professor says, "We know what clover will do." To some extent, doubtless. But we boldly proclaim that it will do what the Professor never dreamed of in his most imaginative moments. It will give us a cheap substitute for turnips and mangolds; it will exterminate the Canada thistle; and it will deliver us from the sweltering and unproductive toil of bare summer-fallowing. Nor will the stock farm, thus managed, be a "bare, miserable affair," either.

BROOM CORN.

Broom corn land should be rich, warm and dry. Good, well-rotted manure, plaster, guano and ashes, all give good returns. Prepare the land as you would for a crop of Indian corn, making the rows three or four feet apart, according as you use the Dwarf or seed of a larger variety. At

first plant theseed by hand; afterward, when much land is seeded, use a drill. Plant after a steady warmth is assured for the season, putting from twelve to twenty seeds in a hill, so soon as possible after the marking furrows are made, as moisture is requisite for early germination. Hoe first, while the plants are small; and when these are well set, thin down to six good plants in a hill, leaving the stalks of each hill as far apart as practicable. Keep the crop clean, and stir the soil as often as practicable during the growing season. As two quarts of good seed are enough for an acre, the expense is not large.—*Michigan Farmer.*

ABOUT HUNGARIAN.

Dr. E. L. Sturtevant, in reply to questions about Hungarian grass, writes the Elmira Farmers' Club: "If we study the plant we find that it has two peculiarities. First, it is a plant of warm regions. Second, it is a drought plant. The inference from this is, what my experience in light soil confirmed, that the ground must be warm at the time of planting, and the soil must be a dry one, that is, free from standing water. A careful examination has shown me that the Hungarian is a very shallow rooting crop—it feeds very near the surface, when the temperature of the soil is the highest. Another peculiarity with me has been that a single cold or cool night checks the growth of leaf, and forces a growth of seed. Bearing these observations in mind, I have not failed in obtaining a very large crop by pursuing the following course: First, planting not earlier than June 20th, in order to secure the warm soil, and the certainty of no cool nights during the ensuing six weeks. Second, manuring or fertilizing close to the surface, and just scratching in. Third, planting at least six pecks of seed per acre. In order to have the crop relished by cattle, I have found it necessary to sow thickly, and to cut just as the heads begin to be discovered. By this course I have a hay the cattle prefer to timothy, and pound per pound it expends better than timothy; and my eye detects no falling away in condition, and the scales detect no change in the milk yield. If over-ripe (and most people cut too late), the cattle do not relish it as they otherwise would, and the eye and scales show inferior feeding value to the best hay."

FLAX.

The crop is profitable only when raised on the right kind of land, in a fine state of cultivation, and free from weeds. The soil must have a dry bottom, and be thoroughly under-drained if necessary, and some cultivators plough three times. It usually follows wheat and potatoes, and as the production of the seed exhausts the ground, it should not occupy the same field oftener than once in five or six years. About a bushel and a half of seed are required for an acre; and for raising the fibre, over two bushels, as a dense, upright, fine growth gives a finer fibre. It is important to sow none but plump, clean seed, from which all the seeds of weeds should be taken by using the best "separators" made for this purpose, or by hand, using a sieve, twelve bars to the inch. The seed crop is cut with a self-raking reaper. Much practice and skill are required in sowing evenly, as the seed easily slips from the hand, and the covering should be done with a very light, fine-tooth harrow, so that the seed may not be covered more than an inch deep, and the work should be finished with a roller. The process of preparing the fibre requires much experience and skill, and we are not able to give its details. If any of our readers have been successful in preparing it for coarse bagging, &c., a statement

would be acceptable. Very little is prepared in the shape of fine fibre in this country, and most of it comes through the cheap manual labour of Europe.—*Country Gentleman.*

HOW TO DRAIN.

On level lands, where the average crop in five years runs low, and the land by nature rich, it is a safe proposition for the tile manufacturer if the farmer honestly performs his part of the contract.

On rich, level lands that need drainage and need it badly, it will pay twenty-five per cent. annually on the investment, and in some instances more.

We desire to impress upon the minds of every one beginning to drain, that it is economy to begin with thorough work. Do nothing in a permanent investment of this character temporarily. Look forward to the time when the whole of the land needing drainage shall be thoroughly drained. Begin right and it will end right, with industry and enterprise. Open drains intended to be used as an outlet for tile drains, should be excavated deeper than it is intended for the tile to enter, and graded to an angle that will not slip down from the sides. In different soils and clays different angles are required. When open drains can be made under-drains, they ought to be avoided, for the reason that they take up land that should be in cultivation, and not unfrequently become plague spots in the field, a harbour for weeds and other pests.—*Drainage Journal.*

PLOUGHING.

The plough will soon be pretty busy, and the man who prides himself on good ploughing may be seen turning the furrows flat as pancakes and making the field as smooth and almost as hard after the operation as before. These flat furrows may take the first premium at the cattle show, but they don't constitute the best ploughing. The object of ploughing is not only to invert the sod, to turn under the grass and weeds so that they will rot, but is to aerate and pulverize the soil. Generally this is best accomplished by turning a lap furrow. The over-lapping of the sod makes the work of the harrow easy and thorough, permits the air to enter freely to perform its share in the work of making available plant-food, while the sod is inverted sufficiently to insure its decomposition.—*New England Homestead.*

CORN IN HILLS OR DRILLS.

As the result of twenty years of experience and observation, I am decidedly in favour of hill planting. Both methods are practised here to some extent, but planting in drills is not done so much now as four or five years ago. In this section the yield of measured bushels of ears per acre will be about the same by either method, but the ears that are grown by planting in hills are longer, the grain better developed, and consequently heavier, giving about ten per cent. more shelled corn by weight than that grown by the other method. * On the other hand, more stalks will be grown by planting in drills; but in our corn fields the grain is the main object, and we think it is better, if we are likely to need more fodder than we get with our crop, to devote a portion of land exclusively to the raising of fodder corn.—*Field and Farm.*

EQUIVALENT OF FOREIGN WHEAT MEASURES.

The following statement of the equivalents of foreign standard measures of wheat will undoubtedly be of interest to many. A quarter of Californian wheat weighs 500 pounds; of other

American, Chilian, or Danubian wheat, 480 pounds, of South Russian wheat, 402 pounds. A sack of flour weighs 280 pounds—nearly equal to a barrel and a half. A Russian chetwert of wheat equals about 854 pounds. An Egyptian ardeb of wheat is 800 pounds. A French kilogramme equals 2½ tons. A German last of wheat equals 8 tons 200 pounds. A Smyrna kilo equals one bushel. A Malta salma equals about 450 pounds. A Spanish fenego equals 99 pounds. A Chilian fenego equals 82 pounds. An Austrian staga equals 187 pounds. A maund of Indian wheat equals 80 pounds. A Portuguese alqueiro of wheat equals 24 pounds. A Barcelona cras equals 1,925 bushels. A Norway maller is 10 maas, or 4,126 bushels. A German maller is 12 scheffeln, or 18,145 bushels. A Vienna metzen equals 1 7-10 bushels. A German centner is about 110 pounds. A French quintal is 220½ pounds.

EARLY AND LATE CUT HAY.

Professor Sanborn, of the New Hampshire Agricultural College, gives the results of his experiments on the above subject, as follows: "Three acres, seeded at the same time, were divided into 6 plots, 2 rods wide and 40 long. They were staked and mown under a string stretched over stakes. Hay, timothy, cut when headed; weight when dried, 8,035 pounds per acre; in spring, 2,851 pounds. The second plot was cut 21 days after, when seeds had formed; weight dried, 4,555 pounds; in spring, 8,886 pounds. Each lot was fed to steers, two in lots. Lot 1 fed on early cut, weight of steers 1,452; lot 2 fed on latter cut, weight of steers 1,450 pounds. Lot 1 ate for 85 days 1,844 pounds of hay, and gained 70 pounds. Lot 2 ate 1,898 pounds, and gained 77 pounds. Before the trial, in a fitting period of 57 days, lot 1 gained 152 pounds, and lot 2 162 pounds. They were even growers. I had a third lot, cut two days after bloom, that gave less gain than either. After 85 days, lot 1 had late cut hay, and lot 2 early cut. After the change, as I have before related, those on late hay ate less, but made the best use of hay eaten. I have fed in much longer periods, and have received no more favourable results for early cut hay."

CARE OF SUGAR MAPLES.

An old farmer living near here, who is the owner of a fine "sugar bush," that has been tapped many years in succession, but is yet in a good state of preservation, says that trees will be little injured by tapping if the holes are tightly plugged when the spills are removed; that instead of finding a large decayed spot next year surrounding the hole made by the bit, the wood will be sound and green clear up to the hole, and that the tree can be tapped within one-fourth of an inch of the old hole, and a good flow of sap obtained. He uses pine for plugs, and to have them fit nicely, he makes them from long sticks which have been driven through the right-sized hole made in a piece of iron.—*Cor. Country Gentleman.*

A WAY WITH STUMPS.

A Dakota correspondent writes:—"In the autumn bore a two-inch hole, four or five inches deep, in the centre of the top of the stump, put in from one and a half to two ounces of saltpetre (nitrate of potash), fill the hole with water, and plug tightly. In the ensuing spring remove the plug and pour in from one and a half to two gills of kerosene oil, and ignite. The stump will smoulder away, without blazing, to the very extremity of the roots, leaving nothing but ashes. This amount is suited to a stump of from two and a half to three feet in diameter."

HORSES AND CATTLE.

THE MARKING OF CATTLE.

In an elaborate discussion on herd-grazing, especially on extensive ranches in the North-West, contained in the last report of the Ontario Agricultural College, Professor Brown suggests a method of marking cattle which is worthy the attention of stockmen. The importance of some trustworthy mode of proving ownership of cattle will be readily admitted. It is desirable to have such a means of identifying animals even where they are not kept in large herds roaming the boundless prairie. Cattle sometimes go astray, and it is not always easy to prove property in them. How to mark hornless cattle is becoming an important question, now that the muley breeds are coming to the front. On this point Professor Brown remarks:—

"The hot iron cannot be used anywhere with them except upon the hoof, and this would always be a very awkward check—in fact, is rarely used; branding on the skin is only of one year's use, and any other form of hair marking soon grows out, and ear labelling would not do unless everybody was above suspicion. It is evident that a plan of ear-marking or hole-punching is wanted, and in order to draw forth something better, I beg to suggest the following:—

"The two ears have four distinct sides—two upper and two lower—thus giving four unmistakable base lines, that the commonest cowherd could not misinterpret: (1) the upper of the right ear; (2) the upper of the left ear; (3) the lower of the right; and (4) the lower of the left.—See Fig. 1.

"The average length of an ear being eight inches, and about four inches in breadth, there is space enough for three distinct positions on each base—one near the point, another in the centre, and the third near the head; these, on our four edges, sides or bases, give twelve positions. The idea now is to arrange such a plan of punch-holes at these twelve places as will represent all the letters of the alphabet excepting I and Z,—therefore twenty four. My plan is as follows:—See Fig. 2.

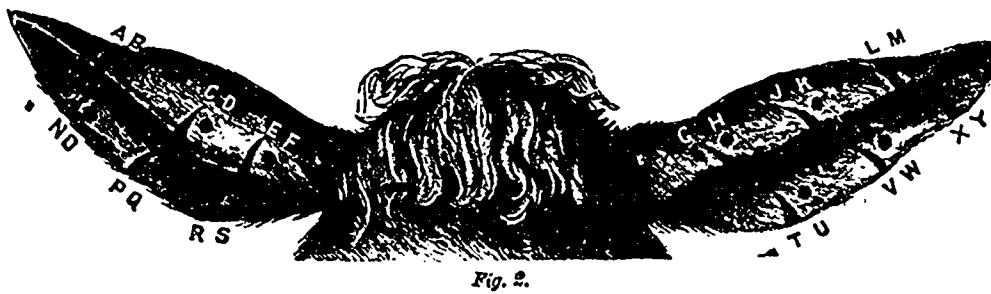
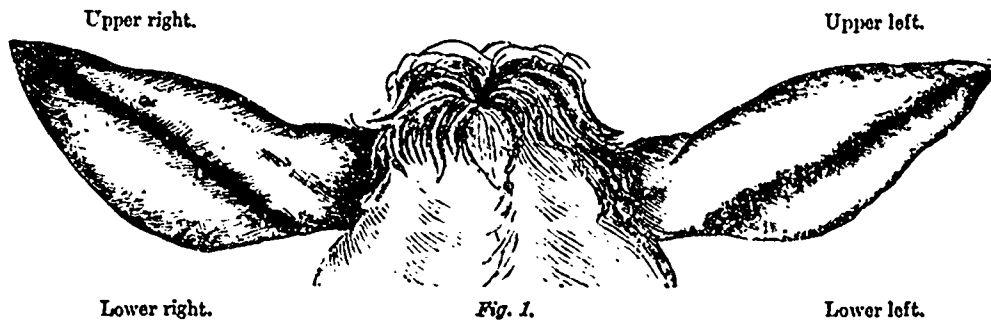
"A double punch constructed to cut out a wedge piece, and also a circular hole, will serve the purpose; and now supposing it is desired to mark cattle belonging to William Brown, Guelph, the cuts would take this position:—See Fig. 3.

"But, of course, the G could be omitted if considered confusing, and to meet the case of similar initials with a different name, such as Walter Butler, the last letter of both christian and surname can be added thus, the cuts being doubled as required:—See Fig. 4.

"And so on, in almost any variety. Were some such plan as this registered as the Government standard or index, much trouble would be saved, as it could not possibly be left to individuals to

record their own ear-marks, because no possible variety could meet the wants of hundreds of different graziers."

The only objections to this plan that occur to us are that it involves a degree of indefiniteness, and, in some cases, would necessitate considerable ear mutilation. The initials "W. B." stand for a great many other names besides "William Brown." William Benham, Galt, might claim the animal also claimed by William Brown, Guelph; and so on indefinitely. Where there are several initials, there would be more cutting and puncturing of the ear than would be consistent with its beauty or autonomy. There is a Canadian whose initials are G. N. A. F. T. D. Could a beast wag its ear or hold it up, if it were marked with all these letters and the place of



W. B., G.—WILLIAM BROWN, GUELPH.



W. B., G.—WALTER BUTLER, GODERICH.

residence? This is an extreme case, and perhaps the Professor can devise a special way of meeting it. No doubt there will be difficulties and objections in connection with this and every other proposed plan of cattle-marking: The Professor makes his suggestion with exemplary modesty and diffidence: "in order to draw forth something better." We publish it as a valuable contribution toward the solution of an important practical question in connection with stock-keeping, and shall be very glad if it helps to draw attention to the matter. It is needless to add that communications on this subject will be very welcome to the columns of the RURAL CANADIAN.

TEN new frame barns are to be erected within two miles and a-half of Kinkora village this summer.

ACTION IN WALKING.

How few horses really walk well, exhibiting, as they should, a free, graceful, vigorous style of action; for the hack it is in constant demand, and has long since established a moneyed value in dealers' yards. Horses are required to move lightly, quickly, firmly; the knee to be well bent, the shoulder to evidence suppleness and freedom. A horse must be of the right stamp, for if he does not stand well he can never be firm yet corky in his gait. As a wide-chested horse is invariably unsteady in his paces, and treads unduly on the outer quarter of his foot, a horse that leans must step short and go on his toes. The nimble hackney moves his legs in quick succession; flat-footed horses go on their heels. These defects import faults in action, and defective action is both unsafe and unsaleable in the best market. The walk has ever been held to be the crucial test of value. A good walker, *ceteris paribus*, will perform well either in the field or on the road. The sharp, quick lift, the graceful turn, the correct stay, the firm, flat, light, grounding of the foot—these are the desiderata, elegance with precision and safety. The lift should at all times be sufficient; if insufficient he will knock his toe against a stone, or some other obstacle or inequality of surface; whilst an exaggeration of lift, being more than is required, will cause him to cross his feet and speedy-cut. No sprawling is admissible. The horse's action in all his paces must be collected. Many high-actioned horses, with strong, upright feet and concave soles, go on their toes. The foot, when flexed in the air, should evidence no lateral deviation—i. e., no dishing, no darting. This will be best observed in the trot.

The stay is executed by catching the foot sharply off the ground, to be followed by a graceful sweep, the direction being both forwards and upwards. Now, this suspension in mid-air is one of the finest tests of soundness, for any horse that is screwed in his foot would, by force of circumstances, be ready to afford the required relief at the earliest opportunity. Hence the stay would be indifferently executed. So much for flexion or lifting, the extension and stay. Our third point is the approximation or grounding of the foot. This must be firm and flat; but no matter how high a horse may go, he must tread lightly, which a horse with longish pasterns and a deep oblique shoulder cannot fail to do.

To adjudicate on the walk. The effects rather than the manner should be appraised. A fast, faulty, insecure walker should be rigorously rejected. And again, though fast and safe, if rough, there is no pleasure in the mount. It is valueless alike to breeder and dealer.

A natural short step must not be mistaken for that cramped action, the sequel of disease. Foreign horses fight in their fore action, and go

wretchedly behind. They display immense energy in their lift, dwell or stay unduly, and throw their feet about, they often turn their toes out, English horses more often in, but a horse that casts his foot well away and horizontally is the horse of our choice, and this direction is the acme of perfection in the horse's mode of progression. To walk well, sound feet, truth in disposition of the limbs, obliquity and proportion in the shoulder, a good high wither, and elasticity in the pasterns, are points demanding the closest attention.—*Agricultural Gazette.*

THE BOOM IN LIVE STOCK.

The demand for oxen to send to the North-West has been so great for months past that almost every yoke that could be got has been bought at handsome prices, in one case \$160 being paid for only a fair yoke of cattle. We fear that some will find that they have sold themselves short of help to work if they have gained in purse. Cows have also so far advanced in price that medium quality brings \$80, and sheep have shared in the rise. In this way the stocks of farmers are worth considerably more than they were a few years ago. This we believe is chiefly owing to the higher prices got for butter, and the demand arising from the establishment of cheese factories. A great many sheep have found buyers from the States, which is all well for the farmers, and arises from causes in which legislation had no part. This must give a stimulus to stock raising in the northern townships, which are better adapted for that than for raising grain. The demand for horses, chiefly by American buyers, has led to greater attention to the class that seems to find favour with them. They generally select animals in good sound condition, with plenty of flesh, and not too old. They have cleared off a great many of this class at fair prices, and left the country well thinned out of what may be termed good horses. Of course farmers are beginning to see that it pays to raise good stock, as a poor class does not pay. While on the subject of horses, we may remark that the exportation of them to Britain seems to have come to an end, as we see little notice of it. The reason of this appears to be that only horses of a certain age, say from four to seven years old, and of good breed, were profitable, and there were too few of these in the country to furnish shippers with such a supply as to make the business pay. What they would not buy for shipment are now finding a market in the United States; and whether it would pay better to raise first-class horses for the British market or a somewhat inferior class for the States will be a point for breeders to decide.—*Fenelon Falls Gazette.*

TAKE CARE OF THE STABLE.

1. Let your stable be well drained and sufficiently lighted. The vapours from a damp putrid floor, and the sudden change from darkness to light, will almost certainly cause blindness.

2. Let the floor of the stalls be quite flat and level. Standing on a sloping place is very painful, and causes lameness by straining the ligaments and membranes. It also produces grease and sore heels.

3. Every stall should be at least six feet wide, and nine feet long. This will enable the horse to turn around without bruising himself, and to lie down and stretch himself with comfort.

4. Let the stalls be separated by partitions, not by bars. They prevent the horses from fighting and kicking each other.

5. Let proper openings be made just under the ceiling to permit the hot foul air to escape, and proper openings at the bottom of the wall to admit

fresh air. Impure and confined air will cause broken wind.

6. The fresh air should enter through a number of small holes, rather than a large hole, such as an open window. That prevents draughts, which cause chills and cough.

7. The temperature of a stable should be that of a sitting-room or a parlour, not over 70° in summer nor under 45° in winter. Hot, close, or foul stables will bring on glanders or inflammation, while a very cold or damp one may cause an incurable cough or disease of the lungs.

8. Do not keep the hay over the manger. The steam and breath of the animal make it both unpleasant and unwholesome. If the hay must be kept over the horse, the coiling should be of plaster. This will prevent the vapours from passing up to the food.

9. Have no opening in the manger from the hay loft. Dust is very often thrown into the horse's eyes when fed in this way, and thus blindness is begun. The breath ascends directly to the food through the opening, which at the same time pours a continual draught down on the horse's head, thus causing chills as well as bad food.

QUARTER-CRACK.

The edges of the crack should be rounded off without cutting into the depth of the crack. Cleanse the parts and soften the hoof by means of poulticing, the shoe being removed. With a view of preventing the split from extending upward, make a cross cut or horizontal out, through the horny fibres, immediately above the split. In extensive cracks, the edges may be held together by means of carefully inserted rivets. To prevent entrance of dirt, fill the crack with shoemakers' wax. If the split extends through the length of the hoof, remove the bearing of the hoof from the shoe, back of the split to the heel, and apply a bar shoe. Apply a mild blister above the hoof. If the horse can be spared from work, he should be given liberty on pasture during two or three months.

AN HONEST MAN.

One day in the years ago a stranger arrived at Dearborn, and enquired for a citizen commonly known as Uncle Ike. The old man was soon found in a grocery, and after the usual "how-de-do," the stranger said:—

"Do I address Uncle Ike Barlow?"

"You dew," was the reply.

"Well, my name is Thorburn, of Ann Arbor."

"Jess so."

"They tell me that you are a good horse-trader."

"Well, I dew make a trade now and then. What ye got?"

"I've got a horse I brought along on purpose to trade with you. Let us first understand each other. You are a member of the Church?"

"Y-es; I expect I be."

"Then, of course, I shall expect you to be honest with me. I've been looking at your old nag over there by the post. How old is he?"

"That 'ere hoss," slowly replied Uncle Ike, as he puckered his lips and squinted his left eye—"let's see—let's see! Well, now, I quite forgit whether he is 9 or 10 years old, but we'll say 10."

"Uncle Ike, isn't that horse all of 20 years old? Come, now, as a member of the Church, give me an honest answer."

"Look a-here, mister," said the old man after a strong gaze at the stranger, "I never trade hosses but one way."

"How's that?"

"When I'm buying of a hoss, I'm a purty good member of the Church. When I'm a-selling of a

hoss, I reckon on skipping about two prayer meetings. When I'm a-trading hosses, then I calkulate on backsliding altogether for a hull month, or until I know the victim won't begin no lawsuit. Now, stranger, that's me, and if you have come here to trade hosses, don't reckon that Matthew, Mark, Luke or John ever writ a line advising a Church member to come right down and give away the ringbones on his own anamile!"

LAMPAS.

Although the iron is not so often employed now to fry the palate as in former days, still, the mere cutting of these parts for no better reason than that our forefathers did the same when a horse did not feel well (which might arise from any one of numerous different causes), is not very flattering to us as a horse-loving nation. These practices could only continue under cover of darkness or culpable carelessness. Might not conscience say to one or to another of us, did that horse's mouth which you saw the other day require lancing or burning? If there was matter formed which required exit to be given to it, it did not require lancing; but if the horse had what is called "lampas," then, most certainly it did not; and more, having mutilated the mouth, you, feeling satisfied that nothing more was necessary, neglected the true cause of the horse's ailment, and thus, it may be, endangered his life. Be it remembered, the horseman's "lampas" is not restricted to cases in which the horse has a sore mouth inducing what is termed quidding. Let a horse but refuse his food, and if the prominent palate be observed (which is natural to every young horse), he is said to have the "lampas," and treated more or less cruelly according to the amount of prejudice existing in the mind of the operator. We occasionally meet with horses that have been burned for "lampas" not once, but twice, or even oftener, and belonging to men of intelligence, who appear surprised that such decided measures have failed to restore the animal's appetite. If we could but induce the average horseman to think for himself, we shall not have this stain remaining with us. If our enquirer and others would make a practice of examining all the horses they can in the mouth, say for three months, we venture to predict that they will be fully satisfied that the appearances in health are identical with those they were accustomed to attribute to the so-called "lampas."—*Breeders' Gazette.*

OATS FOR YOUNG STOCK.

Prof. Henry: I would urge that our farmers feed more oats to young stock, colts as well as calves. There is no food easily obtainable that will so well correct acidity of the stomach and keep the whole system in good order. To "Inquirer," who wishes to raise calves on very little milk, I would say, use oats and oil meal freely, and by studying the wants of your calves you will be able to raise fine animals on a small allowance of milk.

TONICS FOR MAN AND HORSE.

Bruised Columba-root, quarter ounce; pour one pint of boiling water on it, and allow it to stand till cold, then strain. Take half a wine-glassful two or three times a day. For a horse, take three times the quantity of Columba-root, bruised gentian-root, quarter ounce; pour half a pint boiling water, and proceed as above.

For early winter feeding the sugar beet is perhaps better than the mangold, but for late winter or spring feeding the mangold is more profitable. They keep firmer and better in the spring.

SHEEP AND SWINE.

SHEEP-WASHING AT THE MODEL FARM.

The accompanying illustration makes it must be owned, a very lively picture of a scene embodying a little of the poetry of farming, along with some of its prose. Sheep-washing is a kind of holiday affair, and has an element of play in it which the boys like. But to be in the water all day up to the hips, especially in a stream like the Speed, which is mainly fed by springs, has more cold than warm comfort in it, and handling the struggling animals involves no little work. The gentleman in the picture with "billicock" hat on his head, and a walking-cane in his hand, is the Professor, and he is in a "Brown" study as to the pros and cons of the operation. He has come to the conclusion that, on the whole, sheep-washing does not pay, and that so long as the discrimination between washed and unwashed wool con-

market is in favour of the seller and against the buyer.

"In illustration of the farmer's position, take our current year's sales of wool—all unwashed, of course:—

Long wool—Leicester, Cotswold, and Canadian, 1,117 lbs., at 15 cents per lb.	\$167 55
Medium—Oxford Down, 180 lbs., at 18 cents per lb.	23 40
Short—Southdown, Southdown grade, and Shropshire Down, 242 lbs., at 21 cents per lb.	60 82

Total unwashed price..... \$241 77

"Had this wool been washed it would have weighed only 745, 97, and 162 lbs. respectively, and realized as follows:—

Long..... 745 lbs., at 23 cents per lb.	\$171 85
Medium..... 97 " 27 "	26 19
Short..... 162 " 82 "	51 84

Total washed price..... \$249 88

"What does the manufacturer say to this? Where is the farmer's profit in washing wool? Where anything to meet his time and expenses, in addition to risk of a death or two among a

avoid, if possible. The sheep, too, are liable to take cold from standing and lying in their wet clothes, and they get no whiskey or other preventive of this result. If the gain be so small, only about three per cent., it certainly does not pay for the trouble, let alone the inconvenience, discomfort, and risk to man and beast.

BLIND STAGGERS IN PIGS.

Diseases of the hog have engaged the attention of the scientific less than those of any other of our domestic animals, and as a consequence it is more difficult to give a satisfactory answer to questions respecting their ailments. Of all our domestic animals swine are the most liable to disease, partly because they are too often kept in a dirty, filthy condition, until, in fact, they are commonly considered, though erroneously, filthy animals. When allowed to roam at large in hot weather, hogs are sometimes found wallowing in mud-puddles. This operation is indulged in for



SHEEP-WASHING AT THE ONTARIO EXPERIMENTAL FARM.
(Gow's Dam on River Speed.)

tinues as at present, the washing may as well be dispensed with. The Professor's reasonings, figures, and conclusion are embodied in the following extract from his last annual report, under the heading, "The Washing of Wool:—

"There are two opinions on the question of profit to the farmer in washing sheep before shearing. All quotations of prices are by the pound of sixteen ounces, washed, and when the farmer takes his wool to market unwashed he receives one-third less. Example: in the place of thirty he receives twenty cents, because, as the purchaser says, there is fully a difference of one-third in weight.

"We have inquired into this, and have ourselves tested the point of difference in weight between washed and unwashed wool. There is, for all practical purposes, just one-third difference, with a slight tendency in favour of unwashed—that is, as the sheep, after washing, are allowed to dry and re-yolk for about two weeks, the fleeces gather dirt, and are not, properly speaking, clean of all sand and soil, so that the real result on the

large number in a river or pond? There can be no desire to discourage the washing of sheep before clipping, but the advantage to the farmer must be evident. If the manufacturer says he won't buy unwashed at any price, then matters would be changed; but so long as the present one-third difference holds, the farmer has clearly the advantage in not washing."

Besides the considerations presented in the foregoing extract, there are others which should not be wholly overlooked. On the score of humanity it is desirable to dispense with this operation. The sheep is a gentle and timid animal, and however carefully the process of washing is performed there will be not a little rough handling perpetrated. Plunging it into an element so foreign to its nature as water, is a rude shock, the occasional immersion of the head gives a fright, and the wool-pulling is painful. The washers do their work at the risk of colds and rheumatisms. As a precaution against these they are tempted to take stiff doses of whiskey, the use of which, even medicinally, it is desirable to

the purpose of cooling their bodies. The hog does not sweat, and consequently does not enjoy the benefits of this natural cooling process, but substitutes the moisture of the puddle to cool his heated body. On this account it endures with a degree of impunity the filth in which it is frequently compelled to wallow. The manner in which hogs are fed and the loads of fat they are forced to carry are all productive of diseased stomachs and apoplectic conditions of the brain. A close examination of the pig will show on the inside of the fore legs, just below the knee, some small holes which are known as issues, and out of which is thrown much of the effete matter of the animal. If these openings become stopped, then disease is the consequence. When this is known, it is easy to understand how disease may attack the animal, and also to learn that an approved remedy is in washing the pig and providing a clean bed. Cutting the skin of the head open and applying salt, causing it to bleed freely, has relieved the brain from the pressure of blood, and cured the animal of the blind staggers. This

disease is not contagious. An approved preventive is to keep the above-mentioned issues open, and to give the pigs plenty of charcoal, or some anthracite coal ashes, which absorb the acids of the stomach and consequently correct indigestion. Against the apoplectic tendency there is no protection so long as the pig is forced in less than twelve months from birth to weigh 200 pounds or upwards. In the treatment of blind staggers, bleeding and purging are the only remedies relied upon. Pigs under such attacks, however, generally die before any prescriptions can take effect.

COLIC OR STRETCHES IN SHEEP.

Colic or stretches in sheep is generally caused by costiveness or stoppage, which results from constantly feeding dry hay, straw, or other similar fodder. It is most prevalent during the latter part of winter or in early spring, before the grass starts. The actions of a sheep attacked with colic indicate that it suffers intense pain at times, followed by intervals of rest. During the spasms the animal lies down and rises frequently. When on its feet it stretches almost incessantly, and frequently elevates its nose and twists its head. Unless some treatment is adopted which gives relief, it finally dies. An examination after death will show that a part of some one of the intestines has been drawn into or folded upon itself after the manner of a telescope, or the finger of a glove partially inverted. The remedy suggested, say half a pint of melted lard to which one-fourth of a teaspoonful of cayenne pepper has been added, is a very simple one, and can usually be administered without delay, as nearly every farmer has the ingredients. Our remedy is to grasp the sheep firmly by the hind legs, as near the body as possible, and hold it up, head down, from two to five minutes, keeping the back of the animal next to the operator, to prevent being struck by its legs. This position causes a movement of the intestines and restores them to their natural position, so that when released the animal appears as well as ever. We have tried this simple remedy many times, and never knew it to fail in a single instance. These attacks can always be prevented by giving a feed of potatoes or turnips every day during the winter season. If a supply of roots cannot be obtained, cut hemlock boughs and place them where the sheep can have free access to them. Sheep fed upon ensilage will probably never suffer from stretches.

COMING BREEDS OF SHEEP.

In a paper read before a Wool Growers' Association, V. P. Richmond, of Illinois, says:—As "the world moves," we must conform to the movement. If the Englishman says, send us big sheep with brown legs and faces, we grow them for him; and if the Shropshire is not too lazy to glean our wheat fields, or eat our burrs, weeds, and briars, he is the coming sheep for the present time. The Southdown must not be ignored by any means, for on hilly farms he will be at home, and grow more pounds of mutton than the Shropshire. The Shropshire bears a long, thick fleece of medium wool that is always saleable, and usually at better prices than either very long or very fine wools, and is therefore preferable to the Southdown, whose wool is rather short and not very heavy on the sheep.

There are several other families of the Down sheep which are coming into notice. The Hampshire Down is making quite a stir among some breeders—I saw three or four at our last State Fair, but had not the time I would have liked to give them attention. They are larger than the Shropshire, and coarser, said to be of quicker growth; did not show so good wool, nor the mild,

quiet way of the Shropshire. The Oxford Down is said to be still larger, and more prolific and of quicker maturity than any other breed, as I have heard and read. I am not familiar with them. At present it is best to let fancy breeders work up other breeds, and as they are developed we can observe the comparison with other sheep, and govern ourselves accordingly. While I would advise grain growers not to dip much into new or fancy stock, I would also say, breed the best breed pure, and cross nothing.

A CAP FOR THE HEAD IT WILL FIT.

"Twas in a barn-yard, snug and clean,
Where shuffling stacks and sheds were seen;
Where happy cows, with eyes so bright,
Might eat their fill from morn till night;
Where sheep and oxen, well content,
Found out what peace and plenty meant;
Where troughs well filled with careful hand,
For pigs almost too fat to stand,
And scattered barley, oats and peas,
Made pleasant work for hens and geese—
You'd say as you might look about,
Within the stables, and without,
"Here is a paradise indeed,
For pig and poultry, sheep and steed
Yet here, alas! there may be found
A wretched cumberer of the ground.
It was a porker, tall and slim,
With dreadful length of snout and hump.
Altho' quite old enough to know
That pigs were meant in flesh to grow,
He'd grunt about from morn till night,
And keep himself in woeeful plight,
And fret, and worry, and complain,
About the price of roots and grain;
He'd take his food, and then he'd sigh—
"Alas that peas should be so high!
If next year's crop should turn out ill,
Ah, then will cease this pleasant will,
And when a few more years are gone,
What shall we poor pigs live upon?"

The farmer, leaning on the fence,
Makes merrily at the brute's expense:
"Well, now," he cries, "how very fine,
To hear such wisdom from a swine!
Who finds your food, both wet or dry?
Is it yourself, my friend? or I?
You'd better make the best of life
Before you feel the butcher's knife;
For, ere another winter's snow,
He, without doubt, will lay you low:
And then all these good things will be
For him that cometh after thee."

MARIE.

Warton, Ont.

A BREEDER'S OPINION OF ESSEX SWINE.

Mr. William Smith, a well known citizen of Detroit, who has imported, bred, and improved many of them in this country, besides being thoroughly familiar with them in England, says:— "They are invariably black; should have short, dished face, soft, fine ears when young, though with age they will begin to grow heavier and droop somewhat. The body should be of medium length, broad, deep, and straight; with a heavy ham, well let down, and bone fine, but strong enough to support the carcass in good style. When in condition the proportions will always be symmetrical and pleasing; medium well-haired, with a fine and comparatively soft coat. They mature early, their meat is excellent, and a year at most should suffice to feed them to the most profitable condition for pork, which is one of their merits, and when fat the carcass should yield a large proportion of lard. They possess powers of transmitting to their progeny an excess of their own good qualities when crossed upon common and coarser swine; and the first cross upon our natives will improve their qualities almost above recognition. As breeders and nurses they are very fair, though not equal to the Berkshires."

Mr. WILLIAM HYDE, of North Easthope, has a ewe which gave birth to twin lambs, and fifteen days after gave birth to another. The first two were white and the other black.

CREAM.

A WESTERN newspaper advises those who use postal cards to write their messages distinctly, as the time of a postmistress is valuable.

"SEE, mamma!" exclaimed a little one, as puss, with arching spine and elevated rudder, strutted around the table; "see, Kitty's ate so much she can't shut her tail down."

A WOMAN has suggested that when men break their hearts it is all the same as when a lobster breaks one of his claws, another is sprouting, and immediately grows in its place.

"WON'T you ladies tell me what you are talking about?" said a fop. "I'm all ears." One of them looked at him sharply, and said, "So you are; you ought never to get your hair cut."

"SAMBO, me b'y," exclaimed Pat, a rollicking Irishman, to a jolly darkey, "tell us what makes your nose so flat." "Dunno, Mars Pat," answered Sam, "but I spee' it's to keep me from pokin' into udder people's business."

CLEAR ENOUGH.—*First English gentleman* (looking at railroad time table): "Bill, why do they say p.m.?" *Second gentleman*: "That means penny a mile." *First*: "And what does a.m. mean?" *Second*: "Why, 'apenny a mile, of course."

I SAID to my little girl one day: "What a large forehead you have got! It is just like your father's. You could drive a pony carriage round it." To which her brother, five years old, said, "Yes, mamma, but on papa's you can see the marks of the wheels."

HAPPINESS is like manna. It is to be gathered in the grains and enjoyed every day; it will not keep, it cannot be accumulated; nor need we go out ourselves, nor into remote places to gather it, since it has rained down from heaven, at our very doors, or rather within them.

Make channels for the streams of love,
Where they may broadly run;
And love hath overflowing streams
To fill them every one.
But if at any time we cease
Such channels to provide,
The very fountains of love for us
Will soon be parched and dried.

—R. C. Trench.

A SMOOTH sea never made a skilful mariner; neither do uninterrupted prosperity and success qualify for usefulness and happiness. The storms of adversity, like the storms of the ocean, arouse the faculties and excite the invention, prudence, skill and fortitude of the voyager.

ONE of our friends advertised for a serving man, and the next day appeared a stout person of grave air, wearing enormous blue spectacles. "Have you weak eyes?" said our friend. "No, sir," said the applicant, "but I scour pots and things so thoroughly that the glitter of them hurts my sight."

A YOUNG man who thought he had won the heart, and now asked the hand in marriage of a certain young widow, was asked by her, "What is the difference between myself and Mr. Baxley's Durham cow?" He naturally replied, "Well, I don't know." "Then," said the widow, "you had better marry the cow."

WOULD that we could all imitate the pearl oyster! A particle of sand intrudes itself into its shell, and this vexes and grieves it. It cannot eject the evil, but it covers it with a precious substance extracted out of its own life, by which it turns the intruder into a pearl. Could we do so with the provocations we receive from our fellow-Christians, there would be bred within us pearls of patience, gentleness, long-suffering and forgiveness, by that which else had harmed us.—*C. H. Spurgeon.*

GOOD PAY TO AGENTS.

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The Rural Canadian.

EDITED BY W. F. CLARKE.

TORONTO, MAY 15TH, 1882.

DECLINE OF THE WHEAT CROP.

Even in so young a State as that of Minnesota, the lessened yield of wheat excites concern, as well it may. Hon. C. H. Andrews, of St. Paul, has recently written for the Department of Agriculture a special report on the condition and needs of wheat-culture in the north-west. It is "the old story" of soil-exhaustion by too exclusive grain cropping without manure. Deterioration of seed is also considered, and no doubt correctly, to have something to do with the undesirable result. The St. Paul Pioneer Press gives the pith of Mr. Andrews' report in the following brief statement, which contains important lessons for wheat growers everywhere:—

"First, the exhaustion of the alkali in the soil, either by cultivation or otherwise. Up to the time when the country began to be settled, annual prairie fires spread over it, depositing each year a layer of ashes on the surface. The result was that a large amount of alkali was at length left upon the soil, which, as we all know, is an important factor in wheat growing. In cultivated fields this alkali has been exhausted, while in the uncultivated section the prevention of fires has stopped the deposit, and that which was in the soil, either by evaporation or washing, has largely been eliminated from it. Hence, even in old sections of the State, where there are prairies which have never been broken up, the virgin soil if put to wheat fails to show the returns in yield of other years.

Another cause is the deterioration of seed. The reports of the different ones as published in the work before us indicates that Lost Nation and other varieties seem to do better at first than the old Scotch Fife; but in a few years the yield is not as large even as the latter. This plainly shows a loss of vitality and calls for a change of seed. With our Scotch Fife, after twenty-five years of constant sowing without any renewal, could it be expected that it would have all the strength and vigour it once had? Supposing, then, we practise a rotation of crops; supposing we try to restore the alkali to the soil by the liberal use of manures, and where practicable by spreading the straw over the surface and burning it; supposing, also, we renew our seed by sending to the north or some outside section for it. By these means we certainly would take a long step in the direction of right farming, and settle the status of wheat growing in the North-west forever."

IMPORTANT SHORTHORN SALES.

Three great sales of Canadian Shorthorns were held last month at Dexter Park, Chicago, and Waukegan, Ill. Two of them were briefly chronicled in our last issue, but they are sufficiently historical to be worthy of a more full and detailed report. The results prove that the Shorthorn is holding its own, in spite of the competition of other breeds; and while some of the prices are of the fancy order, it is manifest that good, substan-

tial, average blood is not at a discount in the market.

HON. M. H. COCHRANE'S HERD.

The Country Gentleman says:—"The sale at Dexter Park, Chicago, April 18th, of twenty-four head of Shorthorns from the celebrated herd of Hon. M. H. Cochraue, Compton, Can., as might have been expected, was a great success, attracting a large attendance, including leading breeders from many different States. Previous to the auction, Mr. Cochraue briefly addressed the company, correcting the statement which has been made in certain publications that he proposed to withdraw from the business of breeding Shorthorns. He desired to say publicly that such had never been his intention. He was not present with the idea of unloading his Shorthorn stock. He believed there was plenty of room and opportunity for the breeders of the various families of beef cattle. He bred not only the Durham, but also the long-horned Herefords and the hornless Angus, but as long as he owned a hoof he would be the proprietor of a Shorthorn herd. The sale then proceeded under the charge of Col. Judy, with the following result:

10th Duchess of Airdrie, 13 years, O. M. Branson, Astoria.....	\$1800
Airdrie Duchess 4th, 9 yrs., Robert Ogilvie, Madison, Wis.....	7100
Kirklevington 26th, 7 years, T. Corwin Anderson, Side View, Ky.....	500
Princess, 8 years, H. E. Roberts, Georgetown, Ky..	270
Kirklevington Marchioness 2nd, 6 mos., Palmer & Bowman, Saltville, Va.....	3525
Marchioness of Barrington 4th, 9 yrs., J. S. Berry, Sharpsburg, Ky.....	1500
Kirklevington Marchioness 3rd, yearling, T. S. Moberly, Richmond, Ky.....	750
Lady Hillhurst Place, red, 2 years, J. M. Bigstaff, Mount Sterling, Ky.....	800
9th Duchess of Hillhurst, 2 years, O. M. Branson, Cedar Rapids, Iowa.....	8500
10th Duchess of Hillhurst, 2 years, W. H. Porroet, Fennel Duchess of Hillhurst, 2 years, T. S. Moberly	7100
Lady Minna Hillhurst, 2 years, S. E. Ward & Son, Westport, Mo.....	900
Kirklevington Marchioness 4th, 2 years, Palmer & Bowman.....	700
Oneida Mazurka, 2 years, W. A. Harris, Lawrence, Kans.....	1000
Bushbury Kirklevington Duchess 2nd, yearling, O. M. Branson.....	600
Bushbury Countess Barrington, 1 yr., C. M. Branson.....	1500
Lady Oxford Wild Eyes, yearling, T. C. Anderson	2000
11th Duchess of Hillhurst, yearling, J. H. Kissenger, Kissenger, Mo.....	1000
Marchioness of Barrington 7th, yearling, S. E. Ward & Son.....	4700
Oxford Princess, yearling, E. C. Thompson, Edinburg, Ind.....	1000
Imp. Duke of Oxford 35th, 7 years, De Witt W. Smith, Bates, Ill.....	300
Baron Barringtonia 28,505, 5 years, O. M. Branson	1000
Lord Wild Eyes Oxford 39,707, 2 years, Strawther Givens, Abingdon.....	500
8th Duke of Hillhurst, yearling, J. H. Kissenger...	330
8th Duke of Hillhurst, yearling, J. H. Kissenger...	3025

SUMMARY.

20 cows and heifers, average \$2252.25—Total....	\$45,045
4 bulls and b. calves do. 1213.75 do.	4,855
24 head, average.....	\$2079.17 -Total... \$49,900

It is stated that the Tenth and Eleventh Duchesses of Hillhurst, though bid off in other names, were purchased for the Canada West Farm Stock Association, and will at once be included in the famous herds now owned at Bow Park and Glen Flora.

BOW PARK SALE.

The Prairie Farmer says:—"The attendance at Waukegan last Thursday, at the Bow Park sale of Shorthorns, was very good, and embraced a larger number of farmers and amateur breeders than the sale at Dexter Park on the preceding Tuesday. The cattle were in good condition, and averaged \$809.

COWS AND HEIFERS.

Adeliza 14th, red and little white; 3 years—to F. Collins, Richmond, Ill.....	\$230
14th Countess of Goodness, red and little white; yearling—to J. S. Hammers, Paola, Ill.....	180
Duchess 43rd of Woodhill, red with little white; 2 years—to Merchant Kelly, Kelly's Corners, Mich.....	390
Countess of Goodness 13th, red; 2 years—to Jas. S. Hammers.....	180

Kirklevington Duchess 24th, red with little white; 4 years—to N. P. Clark, St. Cloud, Minn.....	\$750
Kirklevington Duchess 30th, red roan, yearling—to N. P. Clark.....	600
Udora 9th, roan; yearling—to B. C. Rumsey, Buffalo, N. Y.....	810
Roan Duchess 12th, red; 7 years—to J. M. Bigstaff.....	810
Rosabella 4th, red and little white; 3 years—to Winslow Bros., Kankakee, Ill.....	305
Royal Charming 9th, red roan; 8 years—to O. A. De Graff, Janesville, Minn.....	375
Beauty of Woodhill, red roan; yearling—to same..	160
Darlington 20th, red and little white; yearling—to Robert Ogilvie, Madison, Wis.....	220
Pauline 2nd, red roan; 2 years—to Alfred Coulter, Rossville, Ohio.....	410
Famosa 7th, red and white; 4 years—to E. A. Osborn, Coffeeyville, Kans.....	275
Duchess 30th of Woodhill, red; 3 years—to Thos. Hughes, Hobron, Ind.....	205
2nd Emily of Springfield, red and little white; 4 years—to A. Neinstedt, Dubuque, Ia.....	185
Cambridge 17th, red with little white; 4 years—to E. Bower, Richmond, Ill.....	275
Adeliza 17th, red and white; 2 years—to John Keith, North Bend, Neb.....	110

BULLS.

King o' the Forest, rich roan; yearling—to Robert Ogilvie.....	680
Earl of Goodness 11th, red roan; yearling—to William Norris & Son, Arlington, Ill.....	270
Waterloo Duke 5th, red; yearling—to Luther Adams, Storm Lake, Ia.....	600
11th Duke of Kirklevington, red and little white; yearling—to B. C. Rumsey.....	500
Roan Duke 10th, red; yearling—to Oliver Oakley, Morrison, Ill.....	500
Earl of Airdrie 5th, red roan; yearling—to J. S. Hammers.....	825
Count Charming 4th, red and little white; yearling—to H. P. Puterbaugh, Lanark, Ill.....	140
Baron Fawley 7th, roan; yearling—to Dill Wiggin, South Bloomfield, O.....	295
Baron Paulin 2nd, roan; yearling—to E. A. Osborn.....	265
Royal Fame, roan; yearling—to W. A. Harris, Lawrence, Kans.....	115
Baron Woodhill 21st, red and little white; yearling—to J. D. K. Smith, Eldora, Ia.....	110
Earl of Springfield, red and white; yearling—to A. Neinstedt.....	85
Duke of Aylmer 3rd, red and little white; yearling—to O. C. Shaw, Newark, O.....	280
Baron Oak 2nd, red and little white; yearling—to J. M. Harman, Milford, Ill.....	185
Orpheus 11th, red and little white; yearling—to C. A. De Graff.....	105

BELVOIR AND MANOR HERDS.

The last of the late series of Shorthorns, at Dexter Park and Waukegan, took place at the Park on the 21st, being drafts from the Belvoir and Manor herds of Messrs. R. & J. Gibson, Ilderton, Ontario, Can. Forty-seven head sold for \$25,625—an average of \$566 per head. Following we give a list of the animals, purchasers, and prices:

Imported Bonfant Fantail—T. S. Moberly, Richmond, Ky.....	\$775
Imported Wild Eyes Winsome—H. F. Brown, Minneapolis, Minn.....	1850
Imported Duchess Wild Eyes—J. M. Bigstaff, Mount Sterling, Ky.....	4000
Imported Bonfant Kirklevington—same.....	3200
Imported Kirklevington Duchess 27th—S. White, Windsor, Can.....	1575
Imported Bonfant Duke of Oxford 3rd—B. C. Rumsey, Buffalo, N. Y.....	750
Rosy Princess 7th—B. Sumner, Woodstock, Conn.	800
Gwynne Duchess 4th—B. C. Rumsey.....	425
Gwynne Duchess 7th—G. J. Haggarty, Hanover, Ohio.....	300
Lord Wynyard—A. M. Reeves, Richmond, Ind.....	125
Lord Oxford Gwynne—A. R. Newport, Morris, Ill.	150
Golden Gwynne—Elijah Clore, Alamo, Ind.....	300
Gwynne of the Manor—N. P. Clark, St. Cloud, Minn.....	200
Charming Gwynne—Gibson & Winthrop, Draper, Canada.....	185
Buckhurst—same.....	65
Governess Gwynne—William Norris, Arlington, Illinois.....	140
Governess Gwynne 2nd—same.....	275
Governess Gwynne 4th—S. D. Cornell, Buffalo, N. Y.....	100
Governess Gwynne 3rd—C. O. Norton, Durant, Ia.	115
Imported Lady Rothesay Bates—B. C. Rumsey.....	625
Imported Lady Hillhurst Bates 2nd—Emory Cobb, Kankakee, Ill.....	725
Lady Rosedale Bates—same.....	300
Fourth Constance of the Manor—N. P. Clark.....	525
Fifth Constance of the Manor—O. DeGraff, Janesville, Minn.....	650
Third Constance of the Manor—same.....	700
Constance of Lyndale 10th—N. P. Clark.....	650
Baron Constance 4th—Harvey Sadowsky, Indianapolis, Ill.....	515
Countess of Darlington 4th—S. E. Ward & Son, Westport, Mo.....	450
Fifth Earl of Darlington—J. M. Harmon, Milford, Ill.....	155

Sixth Earl of Darlington—Thomas Hughes, Hebron, Ind.....	\$255
Imported Barrington, Lady York, and Thorndale Bates 6th—B. O. Rumsey.....	1040
Imported Barrington, Lady York, and Thorndale Bates 7th—to N. P. Clark.....	700
Imported Silence, Surmise Duchess 19th—same..	400
Imported Silence, Surmise Duchess 25th—same..	850
Imported Grand Duchess Carolina 3rd—S. D. Cornell.....	185
Earl of Oraggs—E. E. Hanna, Plano, Ill.....	105
Cambridge Red Rose 2nd—E. A. Osborn, Coffeyville, Kan.....	250
Cambridge Red Rose, and Calf—Harvey Sadowsky Sixth Lord Red Rose—M. Proudfoot, Le Claire, Iowa.....	200
Cambridge Red Rose 3rd—Wm. Morris & Son, Burlington, Ill.....	250
Cambridge Rose 4th—A. Piatt, Stock Yards, Chicago.....	75
Gloster's Garland 4th—E. A. Osborn.....	125
Virtue's Garland 2nd—Charles De Graff.....	120
Gloster's Garland and Calf—Emory Cobb.....	125
Imported Bonfant Peach 3rd—S. White.....	410
Lady Chesterfield 11th—Thomas Hughes.....	185
Lady Chesterfield 2nd—N. P. Clark.....	300

SHORTHORN SALES IN 1881.

The following is a summary of the results of the public sales of Shorthorns in the United States and Canada during 1881:—

GENERAL SUMMARY FOR 1881.

	Animals sold.	Average price.	Total realized.
Kentucky.....	780	\$191.98	\$149,743
Illinois.....	904	137.00	123,850
Missouri.....	633	101.17	69,606
Iowa.....	686	106.62	73,140
Michigan.....	120	599.83	71,980
Indiana.....	115	94.65	10,885
Kansas.....	68	112.82	7,672
Ohio.....	25	112.60	2,815
Massachusetts.....	58	93.87	5,735
Virginia.....	30	100.50	3,418
Pennsylvania.....	58	106.55	6,180
Minnereota.....	38	120.13	4,565
Canada.....	198	409.71	56,640
	3,708	\$168.07	\$586,129

RECORD OF PREVIOUS YEARS.

Sales of 1880.....	3,222	\$144.00	\$464,078
do. 1879.....	2,866	115.00	326,186
do. 1878.....	2,048	155.00	317,448
do. 1877.....	3,237	230.00	742,871
do. 1876.....	4,004	341.00	1,366,805
do. 1875.....	4,847	422.00	1,832,383
do. 1874.....	2,876	385.00	1,031,053
do. 1873.....	1,836	582.00	996,627
do. 1872.....	1,014	313.00	317,625
do. 1871.....	407	290.00	117,914
do. 1870.....	495	343.00	169,557

The above is the summary of the *Country Gentleman*, which adds:—During the twelve years included above our recorded sales of Shorthorns have reached an aggregate of 29,859 head, which have realized in the ring a total sum of \$8,268,576, being equal to a general average for the entire period of a fraction short of \$277 per head.

KINGSTON PREPARATIONS FOR THE PROVINCIAL EXHIBITION.

At a recent meeting of the Council of the Agricultural and Arts Association, some progress was made in preparing for the approaching Provincial Show. The members were driven to the Crystal Palace grounds, which they thoroughly inspected. It became at once apparent that great improvements were necessary. The local Association and Council intimated that a sum of \$5,200 was now available for repairs and new erections, \$1,200 of this amount being subscribed by citizens in anticipation of the present proceedings. It was six o'clock before the Association resumed session. A report of requirements was read:—Main building to be repaired, repainted and refitted; new carriage shed, 250 by 24 feet, the present one being too small altogether; new art gallery, 80 by 28 feet; new dairy hall, 80 by 36 feet, the new building to be furnished so that the process of manufacturing cheese can be seen by visitors; poultry shed, 175 by 24 feet, being an extension and enlargement of the present structure; horticultural hall now standing to be used, but with repairs; new stove building, 80 by 24 feet; hay

barn, 40 by 24 feet, 16 feet high, including granary; horse stalls, 250; cattle sheds to be enlarged so as to have 80 stalls; present sheep sheds will do if enlarged so as to have 150 stalls; pig pens, 150; board offices, new cattle and horse-rings, and other things to be provided and furnished.

Senator Skead telegraphed that the Government at Ottawa would give \$5,000 towards the Show, giving it a Dominion character. Of course the grant will be made on the conditions stated to the deputation from the city recently.

A meeting of the Directors of the Eastern Dairymen's Association was held, at which it was decided that an exhibition of cheese and butter be held in Kingston in September, and that \$250 be given towards such exhibition, if the Provincial Board of Agriculture and Arts will give \$500 toward having butter and cheese factories running upon the grounds.

The City Council agreed to provide the extra buildings and improvements asked for by the Agricultural and Arts Association, though the same will cost probably \$7,000, or double what the local Association had estimated. The Dominion grant was not yet certain, as it had to pass the House of Commons, and the directors did not take it into consideration at all. If granted, \$1,500 will be expended in bringing exhibits from Manitoba and the Maritime Provinces here, and a large portion of the balance of the \$5,000 in the erection of a building for this exclusive purpose. Communications were received from the Mechanics' Institute, Fruit Growers' and other institutions, in reference to the amalgamation and concentration of effort. Various conditions were stated by some of these, on the concession of which only could there be co-operation. The Provincial directors concluded that they were quite competent to manage the Exhibition, and that they would not court dictatorial assistance. The general passenger agent of the Grand Trunk has notified the Association that passengers for the fair would be carried for the round trip at single fare. The announcement of the Industrial Association that there would be no clashing of dates, was received with satisfaction. Committees were appointed to direct the various departments of the Exhibition. The President and Messrs. Carnegie and Morgan were appointed to wait upon the Minister of Agriculture to arrange about the Government grant. The recommendations of the Eastern Dairymen's Association about grants towards holding a cheese exhibit were accepted, and besides \$100 to meet expenses of manufactories it was decided to give two prizes—\$15 for the best cheese outfit, and \$15 for the best creamer. The revision of the prize list occupied a large amount of attention. The prizes will amount to \$15,500—Government grant, \$10,000, special grant, about \$3,500; and local contributions, \$2,000.

It is to be hoped that the fair at Kingston will prove a success. The future of the Provincial Association depends largely upon its being so. A failure, financially or otherwise, would lead many to think the usefulness of the institution was gone. We believe that, well managed, it is yet capable of doing much good service to the agriculture of the Province.

CANADIAN JERSEY ASSOCIATION.

The little Jerseys have been slow in making their mark among the breeds of cattle in this country, but at length seem likely to take their due place. A meeting of the Jersey cattle breeders of Canada was held in Toronto, Ont., on Thursday, April 13th. There was a good attendance. Mr. Valancey E. Fuller, of Hamilton, occupied the chair, and Mr. Wm. Ralph, of Mark-

ham, acted as secretary of the meeting. A discussion ensued as to the propriety of establishing a herd book and club for Canada, or simply a Jersey Breeders' Association. Many were in favour of having a herd book for Canada, but at the suggestion of the chairman the subject was left for future consideration, and a constitution was adopted for an association under the name of "The Canadian Jersey Breeders' Association." One clause of the constitution was as follows:—"To maintain and encourage sound principles and practices in breeding, with a view of procuring the most perfect cattle that shall yield the highest profit rather than for mere beauty in appearance." This elicited much discussion, but was adopted without amendment.

The following officers were elected: Valancey E. Fuller, president; Romeo H. Stephens, of Montreal, vice-president; Wm. Ralph, of Markham, secretary and treasurer; Chillion Jones, Jonathan Carpenter, David Duncan, and Hugh Clark, with power to add to their number, directors. All present joined the Association, which promises to receive the hearty co-operation of all Jersey breeders throughout Canada.

Mr. V. E. Fuller, to whose efforts much of this success of the movement is attributable, writes as follows to the *Country Gentleman*:—"This is a step in the right direction. Jerseys are fast gaining ground here, and the prejudices which many entertained against them are rapidly dying out, now that their true value is becoming better appreciated. The directors of the Exhibition for the county of Wentworth have taken a right step in placing the prize list for Jerseys on an equality with Shorthorns, &c.; and as we are promised a good display of Jerseys at it, I think many of our Shorthorn men will be convinced that if they are puny in stature they are big in butter yields."

UNDER-DRAINING ROADS.

Roads are usually side-drained, though not always. Under-draining them, however, it would seem, is better than side-draining. The following brief communication from a Fulton (Missouri) correspondent of the *Prairie Farmer* is well worthy the attention of pathmasters, and all who have anything to do with road-making:—

"Six years ago I had a new and important public road to open over a very spongy piece of ground. I cut a ditch 2½ feet deep in the centre of the road each way from the lowest point, thus:—||—, making a culvert at the drop, and for tile put in round poles and covered with a broad split piece of timber, covering the whole with earth. That part of the road never gets muddy except for a few days, when the frost comes out of the ground, and then only on the surface. My own observation and experience corroborate that given in a late *Prairie Farmer*; and I notice further that the streets of Fulton that are gravelled on a level with the surface or below, as in a cut, wear out much more rapidly, and cost, I should estimate, more than twice as much as those that are raised above the surface, to keep in repair. Under-draining would save this wear by making a solid bed for the gravel."

The New York *Sun* says that in the United States Senate there are 57 lawyers, and only one farmer; in the House of Representatives, 195 lawyers, and only 11 farmers. The New York *Herald*, commenting on these figures, remarks:—"We want fewer lawyers in Congress, and more farmers, doctors, mechanics, merchants and clergymen. Congress needs to be pious, to pay less for cock-tails, to appropriate less, and work more." All of which applies to other legislative bodies besides those of the great Republic.

SKETCHES OF CANADIAN WILD BIRDS.

BY W. L. KELLS, LISTOWEL, ONT.

THE KING BIRD.

This famous little warrior is well known through all the temperate regions of North America. It frequents all parts of Canada, but its favourite habitats are orchards, plantations, and patches of native woods bordering on water-courses. It returns to this country, from its winter sojourn in the south, in the early part of May, and until the female begins to construct her nest is comparatively silent and peaceful; but after that period the male bird is the terror of all other small birds, attacking them without the slightest provocation if they dare approach the place which his companion has chosen for her nest, no matter how innocent or non-combative may be their character. His whole life during the breeding season is one continual scene of broils and battles, in which he is always victorious. He is strongly attached to his mate, and while she attends to her nest he is stationed near by, and will attack with gallant and daring courage any feathered intruder, not excepting the white-headed eagle. His mode of attack is to mount in the air above his enemy, and then by a rapid movement dart upon its back, and sometimes remain there and ride off a distance, picking out feathers and uttering notes of triumph to the great annoyance of his adversary, who by various turnings endeavours to rid itself of its troublesome little opponent. But the king bird, from his natural abilities and constant practice, is not easily dismounted, nor does he give up the contest until the object of his dislike has left the neighbourhood, and his passion has exhausted its fury. The female, too, is courageous, and often joins her mate in the fight, but she does not pursue the fugitive far. This bird is between seven and eight inches long, the plumage is dusty black above, the head and neck darker than the other parts; the lower parts are white, and the tail is also fringed with white. Its nest is placed in various situations, generally on a branch of a tree at various elevations from the ground. It is formed of wool, fibres of bark, hair, and small roots. The eggs are usually four in number, clear white, marked on the large end with brown spots. But although the king bird is successful in his contests with the larger species of birds, yet he sometimes meets with trouble from the purple martin and the oriole, while the red-headed woodpecker at times irritates him very much by clinging to the side of a tree and playing bo-peep around it, while he, highly enraged, makes every attempt to strike it, but in vain. Sometimes when thus enraged he will even attack his female, and cause her to take refuge among the thick branches until his passion has subsided. He generally feeds on insects, chiefly those of a large size, which are generally captured on the wing or picked up off the grass. Sometimes he will take his stand on a stalk or tall weed in the pasture field, near where the cattle or horses are feeding, and then make a series of sweeps around them in pursuit of insects, particularly the large black gaddy, which are so annoying to these animals, in which case he must be looked upon as a beneficial servant; but his partiality to the honey-bee is not relished by the apiculturist. Some contend that it is only the drones that are appropriated, and that the working bees are not molested, but the probability is that the king bird exercises no discretion in the matter, but snaps up whatever kinds of insects are most easily procured whenever he feels disposed to dive upon these humming creatures. Notwithstanding this, however, the agriculturist may be assured that this bird renders him more service than injury, by destroying great numbers of other insects which prey upon the fruits of his industry.

THE DAIRY.

CHEESE PROSPECTS.

Last year was exceptionally hot and dry during August and September, making it very unfavourable for the production of fine fancy goods. Cheese that was placed in cold storage in New York did not come out in as good order as was expected, and we should not be surprised if this is the cheese referred to by Mr. Faulkner. I give the following comparative table showing the situation of the export trade on the 1st of April:

	Receipts.	Exports.	Cable.	Freight.	Price.
April 3, 1880....	6,273	4,648	71s.	35s.	14½c.
April 2, 1881 . .	10,589	16,258	69s.	25s.	13½c.
April 1, 1882....	8,897	19,263	61s. 6d.	15s.	13½c.

In looking over the cheese market for the entire year (1881), I think dairymen have no reason to complain of prices. The market has been remarkably steady, and was better than was expected at the commencement of the season.

As to the future market for 1882, there are too many factors liable to occur to enable one to speak with any degree of certainty. The outlook appears to be favourable, and judging from the past a fair price may be expected in fine goods. As the tastes of consumers are becoming more and more fastidious in this regard, it is important that our cheese-makers and dairymen employ their best endeavours to produce a fancy article.—X. A. Willard, in *Country Gentleman*.

GOOD MILK YIELDS.

The following records of good cow performance are from the correspondence of the *Country Gentleman* and *Prairie Farmer* :—

ADELMA 7299.

"We have just been making a test of Adelmia 7299. She is making us 12 lbs. 4 oz. per week of unsalted butter, which is the largest yield we ever had from any cow. She will not be four years old until the 1st of next August. For the week just passed we have made from 8 cows 60 lbs. of butter, which is the best yield we ever had from eight cows in one week. Dew Drop has tested nine pounds of butter per week. We are feeding cottonseed meal, and like it very much. Have you read Col. M. C. Weld's letter to the *Country Gentleman* on ensilage? I think he comes pretty near the truth about the matter. The best feed we have ever tried is mangel wurzels, good hay, oats and peas. I think these with little corn meal and wheat bran are good enough for anybody's cows."

YIELD OF CREAMER 2467.

"I purchased last December the Jersey cow Creamer 2467, sire Tom Dasher 420, by Albert 14, dam Creampot, imp., 460. Her feed has been cut corn stalks dry, and only one feed of hay each per week, with two quarts each of corn meal and wheat bran in one feed daily, with four quarts of carrots or beets. She was milked March 3 at 6 o'clock a.m. and at 6 p.m., and milk allowed to stand until the 4th, when milk and cream were churned. The product was 9 ounces of butter, well worked, but not salted. She is due to calve March 21st—eighteen days after this test. She is own sister to Jersey Cream 3161, whose record (see Campbell Brown list) is 71½ pounds for 30 days. She is a large cow, orange fawn, with an immense escutcheon, between a horizontal and demijohn."

A GOOD HEIFER.

"As some of your correspondents have requested the butter yields of Jerseys and their grades, I submit the record of my three-quarter bred Jersey heifer, which dropped her first calf Jan. 25th, being then two years and six months old. She was tested for one week, commencing

Feb. 18th, and gave 75½ quarts of milk, or 157½ pounds. From this I had 9 quarts or 17½ pounds of cream, which churned 7½ pounds of butter. This is only an ordinary record, still it shows the superiority of Jersey blood for producing cream and butter. Neither her dam nor granddam would produce half this quantity of butter per week."

"I am a reader of your paper, and I saw in it an article recently under the caption 'Good Returns.' It referred to the herds of Mr. McKinly, of Elgin, Ill., and Mr. Millard, of Lake Mills, Wis. I am running a small dairy, and I will state what the returns were from it. I milked, on an average, nine cows for the year—sometimes more and sometimes less; milk taken to H. W. Mead's factory and made up into butter and cheese on the dividend plan. The number of pounds of milk for the year was 77,605; money received, \$803.33. This is 8,622 pounds of milk per cow, or about \$89.25 per cow for milk. Thirty dollars' worth of calves were sold, making \$339.33 for milk and calves, a total of \$92.59 to the cow for the year. Number of pounds each month, from March 1st, 1881, to March 1st, 1882:

	Pounds Milk	Per cent.	Cash rec'd.
March.....	5,213	96	\$ 50.04
April.....	7,544	70	50.70
May.....	9,412	61.7	58.07
June.....	10,269	57.8	59.35
July.....	9,396	79.3	74.51
August.....	8,095	1.03.6	83.86
September.....	8,394	1.20.7	101.32
October.....	7,496	1.36.2	102.09
November.....	5,333	1.57	60.52
December.....	8,394	1.56.2	85.98
January.....	3,079	1.50	45.09
February.....	2,700	1.60	41.80
Total.....	77,605	13.48.5	\$803.33
Add money for calves.....			50.00
			\$833.33

It will be seen by the table that for every hundred pounds of milk I received \$1.34.8.

"This shows what can be done in a small way. Three times the number could be handled about as profitably. My cows are of no particular breed, but there is a sprinkling of Durham. Good milking, gentle handling, and a little feed, help to make a good cow. I have steady milkers as far as possible. When in want of a cow, and I can find one that suits me, I buy her, but I often get the worst of the trade. Caring for my cows in winter, I give grain feed, middlings, and bran—two parts bran to one of middling. They get fodder corn once a day until the 1st or 10th of May. The first feed in the morning is from three to four pounds to the cow. About half-past five, milk: and about seven a feed of timothy and clover mixed—clover preferred. Cows kept in until about ten, and if very cold, out but a short time during the day, only to water, and then a feed of fodder corn; at half-past two or three a feed of corn stalks. Stables cleaned and bedded down: at four the cows are put in the barn, about five, three to four pounds of feed to each cow, then milk: feed hay in barn after corn stalks are gone. Summer care: Tame pasture, nothing heavier than bran from June to November, and that light in flush feed. I think I can get better returns for the same amount of middlings and bran fed than from the same worth in corn meal and oats, and keep my cows in better shape. I do not confine myself to dairying alone. I raise and fatten some hogs, buy wethers in the fall and fatten them in winter. Mixed farming suits me best."

A French chemist reports that water made slightly salt, and to which, when boiling, bran in the proportion of one quart to every gallon has been added, has been found in a series of experiments to increase the yield of milk twenty-five per cent. if given to the cows as their ordinary drink.

BEES AND POULTRY.**TRANSFERRING BEES.**

Now that we have gotten our hives nearly made and painted, we will turn our attention to those old box hives.

The one secret of handling bees without trouble is this. A bee filled with honey will not sting unless you crowd her to it. There are two or three ways to cause them to fill themselves with honey: by blowing smoke in at the entrance, or down among the combs at the top; by confining them to the hive, and rapping gently on the hive with a stick or light hammer; or by sprinkling the bees and combs with warm diluted honey, or sugar syrup. A bee filled with honey is much like a man who has just eaten a good hearty meal—don't feel very much inclined to quarrel or fight. Now, then, the fruit trees, etc., are in full bloom, the bees are getting plenty of honey to live on and repair combs with, we will go at it.

Have a ball of cotton twine for tying in comb, a lot of pins whittled out about the size of matches, and a little longer, and a bradawl to punch holes in the frames with. Get your smoker lighted, take a newspaper along to read, give the stock three or four good puffs of smoke in at the entrance, sit down on the hive and read an item in the paper, now and then giving the hive a thump with your heel; now a little more smoke—just a little, mind; give the bees ten minutes in which to get all well filled with honey. You have read several items by this time. Now pick up the hive and turn it bottom up—they won't bite you. Leave another empty hive or box, as near like the old one as you can, on the old stand, to catch the flying bees. Carry the hive into the shade and set it down so that it will be solid, with the bottom up. Place another box or hive on top, and tip it back a little so you can see the bees run up into it. Now blow a little smoke occasionally down the inside of the hive next to you, and keep thumping on the hive lightly with the little hammer. Take time to it; don't hurry; and very soon you will see the bees hurrying up the combs and back of the hive into the box above. If they tend to run over the other three edges, give a trifle of smoke in their faces, and they will hustle back and across to the general crowd. Keep this up till you can see that nearly every bee is out of the hive. Now take the box of bees to the old stand and set one edge up on a block.

If you like, you can now cut the old hive to pieces with a cold chisel, but we prefer to work with two tools—a very long, thin knife to cut the combs from the sides of the hive, the other one made of quarter-inch iron to cut the combs off down in the hive. This rod is about two feet long, one end turned into a ring to hold it by, the other turned at right angles, about an inch and a half long, and hammered out thin and sharp, so that when you put it down between the combs this thin blade can be run across the combs to cut them from the top of the hive. As fast as you cut the combs out, brush off the few remaining bees into some box or your new hive, and lay the combs down on a table or board, but do not pile one on top of the other. Do not put in much honey, as it is heavy and apt to fall out and kill many bees. Now select the most empty pieces of comb, and those containing brood, use the largest ones first; many of these will fill a frame full and some to spare. Lay the frame on the piece of comb just whichever way it will fit best (for I could never see that it made any difference whether the brood was right side up, or bottom up, or sidewise). Mark it around inside the frame, and cut off the extra portions with a sharp knife. Crowd the frame down over the comb

thus out, and if out a little large, and with but little honey, it will wedge tight enough to hold in place with no extra fixing. If it is a little loose, tie a string around it in one or two places from top to bottom, and may be use three or four of the little wooden pins, by punching holes through the bars of the frame, pushing the pins in till they stick into the comb about an inch, and breaking off the remainder. Use up all the brood, and clean empty worker comb, in this way: Where one piece will not fill a frame, cut another piece to fit, and fasten with twine and pins. Place the brood in the centre of the hive, the empty combs outside of it, and a division board down each side of the whole, with a good thick quilt of burlap on top to confine the heat and bees to the proper space.

If there are any small bits of capped brood left, place them on edge on the frames under the quilt, and they will hatch just as well. Wipe up all drops of honey on the outside of the hive, take it to the old stand, and have the bees into it from the box, just like a natural swarm, by dumping them down in front. See to it that they all finally get in, or you may miss your queen.

It is not safe for a beginner to attempt to transfer bees unless he can place honey in the open air without any bees troubling, as he will very likely have his stock robbed out, if they are not getting honey enough from the fields to prevent them from noticing exposed honey.

In a few days you can go to the hive, cut the strings loose at the top, and pull them out. But you should inspect their work to see that they are building all up good and straight. The pieces of honey that are left, that which is not fit for the table, can be uncapped and extracted, the white combs used for starters in the surplus boxes, or melted up into wax. If need be, you can feed the extracted honey back to the stock later for brood-rearing and comb building.—*Will. M. Kellogg, in Prairie Farmer.*

OPERATING FOR CROP-BOUND.

I noticed that one of my pullets was "crop-bound." The symptoms were stretching of the neck and drawing of the crop to one side; crop distended, as if over-fed, apparent hunger, but could not eat, because there was no place to store food. We got a needle and thread, sharpened a knife, and cut a slit through the skin and crop, dug out the mass of hay, sewed up the crop, then the skin; placed the fowl in a box, where she could get nothing to eat except what was fed to her. I gave her about half a cracker a day, soaked in milk, until nearly healed. The fowl got well, and is alive and well to-day. We attributed our success not so much to the skillfulness of the operation as to the treatment afterward. No doubt if she had been turned out and fed as usual, she would have filled her crop so full that it would not have healed.—*Country Gentleman.*

SALICYLIC ACID FOR BEE STINGS.

Although salicylic acid, from having been too highly extolled, has fallen somewhat into disfavour, there can be no doubt it is useful in the case of bee stings. An Austrian paper recommends the following treatment. First, to remove the sting as quickly as possible with a forceps or by scratching with a finger, but never between the thumb and forefinger, because this squeezes more of the poison into the wound. Next squeeze the wound until a drop of blood comes out, and rub the place as large as a dollar with an aqueous or dilute alcoholic solution of salicylic acid. The effect is still better by injecting the salicylic into the wound with the hypodermic syringe. After this the spot is painted with collodion to keep out

the air. A sting treated thus causes little or no pain, slight inflammation and swelling, and is not followed by nettle-fever or lameness in the most sensitive or nervous individual.

MIXING SOFT FOOD FOR CHICKENS.

There are many ways of preparing soft food for poultry that we could not recommend, though practised to a great extent by inexperienced poulterers. By far the greater number of beginners mix it too wet and sloppy, and give it as a sticky, porridgy mass, which clings to the beak of the fowls. Such feeding often causes diarrhoea, and in any case will rarely produce a proper egg return. All meal, whether intended for young or old fowls, should be mixed firm and short, so that the whole mass will crumble by handling. Food so mixed does more good, for the simple reason that it is more wholesome in itself and more enjoyed. Meal combined with potatoes or turnips, need not be mixed quite so dry, but all soft food, rightly prepared, will be hard enough to break and crumble if thrown upon the ground.

FEATHER EATING.

This habit is generally the result of confinement, want of grass or green vegetables, and want of pure water. The habit once indulged in for a length of time, is often difficult of eradication, and no certain remedy will help in all cases. A change in the feeding and general management is required. Give ample range for roaming on ground where worms and grass, etc., are accessible. A bran and linseed mash twice a week would be beneficial, and in the absence of grass, hang up a head of cabbage or lettuce by a string just within reach of the birds. To give them occupation, rake down their feed in the earth, and let them scratch for it. The drinking water should contain enough of carbonate of potash to give it a decided alkaline taste. Raw bones, crushed or ground, are beneficial. If only a few of the birds indulge in the habit, they should be taken away.

EXTERMINATING BEE MOTHS.

The fumes of burning sulphur will destroy these larvae, and, in order that their destruction may be more easily and thoroughly accomplished, empty combs and honey should be kept in a small, tight room, and stored in such a manner that the fumes can readily penetrate to every comb. The best manner of conducting the fumigation is to fill an old kettle half full of ashes, put in a shovelful of burning charcoal, then pour in one pound of sulphur for every one hundred cubic feet the room contains, and close the room for a day or two. If a bee-keeper will keep only Italians, in good, well-made, movable-comb hives, give them the proper care, examine his empty combs and honey often during warm weather, and fumigate them when necessary, he will find the much-talked-of bee moth and its larvae among the least of his troubles.

The period of incubation is—Hens sit 19 to 24, generally 21, days, turkeys and peafowls, 26 to 29 days; geese, 28 to 33 days; ducks, 28 to 32 days, pigeons, 18 days from last egg; canaries, 13 days from steady sitting.

The *American Bee Journal* says.—"The demand for bees this spring is very large. Mr. Richardson, of Canada, remarks as follows: "I successfully wintered twenty-five colonies and have since sold all of them but five colonies, and could sell one hundred more had I them for sale." Those having bees to dispose of should advertise them at once, so that those wanting them will know where to apply for them."

GARDEN AND ORCHARD.**IMPREGNABLE EVERGREEN HEDGES.**

An evergreen hedge, kept in proper order, is an ornament throughout the whole year. But being destitute of thorns, it is easily broken through. One may be easily made, however, with thorns that will stop an intruder, in the following way: When the hedge, after cutting back, is about twenty inches high, set upright stakes or small posts along in its centre about twenty feet apart. On these posts stretch a well-galvanized barbed wire, resting on the top of the hedge. The evergreens will grow up and around it, and keep it in its place. In one or two years more, when the top has been cut thirty inches or more in height, stretch another barbed wire. The growth will secure this as before. A third wire may not be necessary, but it would complete a strong barrier. As the evergreens become stouter, they will hold the wires from ever becoming displaced, and no man, boy or quadruped will desire to pass such a hedge. Any number of wires may be used if special strength is required. The expense of such a barrier will be moderate, and the only care will be to keep the trees cut back annually to a moderate extent, or triennially more largely. It will possess an important advantage over common barbed wire fences, since by their invisible nature animals are sometimes injured in striking against them. The only perfect way by which a barbed wire can be placed in a hedge is by allowing it to grow up around it. Norway spruce is the strongest grower, but hemlock and arbor vitæ may also be made perfect by the barbed wire. The buckthorn, the only fault of which is want of strength, may be rendered secure in this way.

PLANTING TO-MORROW.

No man has seen to-morrow. To-morrow I will restrict myself, says the spendthrift. To-morrow I will pay my debts, says the bankrupt. To-morrow I will reform, says the drunkard. We have a man here who is going to plant fruit trees to-morrow. He stopped our teams on the road, laden with trees, and asked if we had any more left. "Yes; well, I will come to-morrow and get some." Not coming, we sent our man over to see him. His place was barren of everything eatable but hogs and hens. "Young man, I will come over and see you to-morrow—I want to put out an apple orchard and some cherries, but I don't know just how many I want. No, no, I won't order now—wait till to-morrow." Our man thought he heard a giggle from the young folks in the next room, but couldn't understand the point. One day, about the last of the season, our man, who never says fail, drove up to our to-morrow friend's door with just the kind of trees he said he wanted. "No, I can't plant this year; it is too late now—must put it off again." "How long have you talked about planting trees, my friend?"

"Well, sir, I have talked about it these twenty years, but never quite got at it. Sometimes the folks was sick, sometimes I hadn't a cent to buy with, sometimes I thought the boys ought to do the settin' out, so long as they would get all the good of them—one reason or another has upset me, and while I have been foolin' about it my neighbours have got their orchards into bearing. But see here, young man, you come around next fall, and I rather think now that I'll plant them 'ere trees. I need 'em, you know. Yes, come around; come around. But our agent shook the dust of that man's farm off his feet forever, never more to return to-morrow.—*Green's Fruit Grower.*

CURRANT CUTTINGS.

The currant may be successfully propagated from slips. Cut strong, healthy ones of last year's growth, and cut into pieces of six or eight inches long. Set them in a rather damp soil, leaving only one bud exposed to the light and air. Press the earth firmly about the young slip, and keep the grass and weeds out. During the summer you will find that most of your slips are growing. They should be left in their beds about two years, and then set where they are to remain. They ought to begin bearing the second year after being set in the open ground. The old Red and White Dutch are about the best varieties, all things considered. My soil is light sandy loam, and was well enriched with common stable manure before the bushes were set—four feet apart one way and six feet the other. They should have been six feet apart each way.

FOLLY OF DEFOLIATING GRAPES.

No surer evidence of the impropriety of defoliation "to admit the sun's rays" can be cited than the results of recent experiments in bagging grapes. We see that the covered clusters ripen more thoroughly, colour more beautifully, and assume that charming bloom which, without artificial aid, in many sections, they rarely attain. The foliage in a great measure acts as the lungs do in the animal creation, and every perfect, healthy leaf taken off a plant destroys a portion at least of its power of subsistence, for vegetation extracts from the air a wonderful amount of nutriment which enters into its organism through the myriads of minute apertures which nature has so wisely ordained for this express purpose. Then why partially cut off its means of supply to gratify the whim that "fruit must receive the direct rays of the sun?"—*New York Tribune.*

STANDARD TREES VS. DWARF PEARS.

A *Fruit Recorder* correspondent says that he transplanted some dwarf pear trees that had been set out eight years, and when put out were set eight to ten inches below the budded section or junction, and in taking up the trees large roots have formed from the pear wood above the quince stock, so much so that he had to cut many of them off with an axe. We set in our father's garden twenty-eight to thirty years ago, a few dwarf pears, setting them deep, at least six to eight inches below the junction, and to-day they are rooted to or near the surface of the ground. So we say, away with the false theory that setting of the dwarf pear on quince stock does not cause them to root from the pear wood, and in time they become almost standards.

FORCING STRAWBERRIES.

A correspondent of the *South and West* says: "I procured a half-hogshead, filled it with rain water and put into it one quarter-pound of ammonia and one quarter of common nitre. When the strawberry plants were blossoming I gave them a sprinkling of the solution at evening, twice a week, until the fruit was nearly of size. The result was double the amount of fruit."

RESTORING OLD ROSE BUSHES.

The *Gardener's Chronicle* recommends the following treatment for old "lanky" rose bushes: Most essential, they must have manure. Prepare a compost of two parts of turfy loam, one part rotted manure, and one of soil from the kitchen garden. Mix it over three times. Then dig a circular trench four or five feet from the base of the stem, and two or three feet deep, cutting off

most of the roots. Then fill and tread in the compost, and mulch the surface. An eighteen-year Devonensis was treated in this way, and it grew enough to "gladden the most enthusiastic rose-grower."

THE BEST MANURE.

With all the merit of modern knowledge, there is no saying that includes more real and enduring truth than the old adage that "the foot of the owner is the best manure for the land." Mr. Wade's paper forms an illustration of this. He had apples so fine that twenty-two Boston Russets covered a barrel head, and after a big crop in the oven year had a bigger one the next—the "off" year. But he says he "kept the dirt whirling," and scraped stems and thinned tops so diligently that evidently his foot was seldom away from the orchard. He "wakened the sickliest trees into new life."—*New York Tribune.*

RASPBERRY AND BLACKBERRY CANES.

The raspberry and blackberry canes which were laid down during the winter, should be uncovered the first week in April and firmly staked, having of course been pruned before laying down, and the ground thoroughly forked-up. After the new sprouts are up six to eight inches, any offal of the garden, such as the rakings of the top-dressing, weeds, grass, and if there should not be enough of these, then long manure should be applied as a mulch. These fruits require a cool, moist soil, and the heavier and more frequent the mulching the better.—*German town Telegraph.*

LIMA BEANS.

Joseph Harris recommends the following treatment of the Lima bean: Put four or five seeds in a pot and cover them an inch deep. After they are up and the weather is warm, set them out without disturbing the roots, which is done by placing the hand on the top of the pot with the plants between the fingers, and then turn the pot upside down, and strike the rim gently against any solid object, when the soil and plants will come out together. The soil must be first thoroughly soaked with water to prevent the earth crumbling off the roots in taking them out.

MONTHLY ROSES.

H. B. Ellwanger—and we have no better authority—recommends for the best continuous bloomers the following six sorts: Gerrard Dubois, one of the hardiest, bright-red teas; Homere, mottled salmon rose; Jean Pernet, beautiful light yellow; La Franca, remarkable for its fragrance; Marie Van Houtte, pale yellow with rose edges; and Mons. Furtado, a valuable yellow tea. For the best twelve he would add Appoline, rosy pink Bourbon; General Tartar, deep mottled rose; Madame de Vetry, salmon rose; Madame Lambard, reddish salmon; Sombreuil, creamy white; and Triomphe de Luxembourg, coppery rose.

RAISING WINTER SQUASHES.

Robert McCrone, of Thompsonville, Ct., says in the *Homestead*: "The secret of raising winter squashes is to plant them late. When maggots get into the vines, the only way to save the crop is to cover the vine about six inches deep with earth. Burying the worm kills it, and doesn't hurt the vines. The Crescent strawberry is the best variety for all purposes. The way to get rich in farming is to keep down weeds and use plenty of manure."

HOME CIRCLE.

DR. ORMISTON ON FARMING.

At a recent meeting held in New York, the Rev. Dr. Ormiston gave his opinion of farming. He said:—"I was a Scotch farmer for nineteen years, but it was a very different style of farming from that in which you, gentlemen, are engaged. These arms have levelled many a giant in the forest of Canada. These shoulders have ached with carrying sap to make six hundred pounds of maple sugar. How would you like that? I knew all about my style of farming before I went to college. I still retain a strong love for the calling, and if I was not a minister I should certainly be a farmer. As I have said, our old homestead recently fell into my hands, and I have placed my nephew in charge of it. I obtained some pamphlets on ensilage from Mr. Brown, and I have been thoroughly convinced that the thing is correct, and based on scientific principles. There is no principle in nature which the God-given brain of man cannot make serviceable to himself and fellows. You are introducing a new system into the department of agriculture, and I am going to introduce it in the northern land. I desire to popularize it among the men who need it; not that it will make me richer, but I do propose to set a magnificent example. On my farm you can plough a mile and a half without striking a stone as large as a hen's egg. The old elm is standing yet, beneath which sweet words were spoken thirty-five years ago, and, I need not say, is hallowed by a thousand pleasant memories of days that are fled. Now, I am going to preach on Sabbath and talk ensilage all the week. You know the Scotch are a stubborn people. Nothing in the world is as stubborn as a Scotchman, but there is a way to reach him. You give him three bawbees where he only had two before, and you have him. Show him how to make three pounds of butter where he only made two before, and you have captured Sandy. They come from a land where they must dig or die, and they are forced to make the most of everything."

THE DAY OF REST.

Sweet day of rest! the very sound is healing—
A hush amid the conflict and the strife;
The calm of heaven is softly round us stealing—
We hear the whispers of a holier life.

Earth's misty veil, that hangs so closely round us,
Is gently lifted this one day in seven;
And pressing cares, which in their net have bound us,
Retire, and leave us transient gleams of heaven.

This day, on which the Saviour rose to glory,
Has left a shining radiance on its track;
Again we hear with joy "the old, old story;"
Our childhood's faith on wings of light comes back.

Oh, wherefore, wherefore should we lose the blessing,
When morn restores the round of earthly care?
Happy the souls who, all in Christ possessing,
Breathe, e'en below, heaven's pure celestial air.

And we, amidst the daily path of duty,
May keep the oil still burning in our breast;
So shall the toilsome path grow bright with beauty,
And every day shall be a day of rest.

THE MEDICAL PROFESSION.

The doctor, as things now are, lives by the existence of disease. If we were all, and always, in good health, his occupation would be gone. But every good doctor—i. e., every doctor, except, possibly, a few unspeakable wretches—fights disease to the very utmost of his power. He gives no quarter wherever he sees it. His one work in life is to destroy that by which, under our arrangements, he gets his bread. He has no faith in disease. He believes in health, and that only; and if any physician were known to sow disease broadcast for the sake of gain, the rest, instead of thanking him for making them work, would kick him out of society—yea, out of the universe, if they could, and it were lawful.

And when a time of special danger comes, when the greatest pestilence sweeps through the cities, the doctor's ethics require that every physician shall take his life in his hand, and shall be at his post, waiting for every call of distress that may come to him. That is, as Ruskin says, "the point of honour" to the profession—the point at which the doctor must die rather than yield. And that is why the medical profession is a *liberal* profession; because it has a standard of duty and of honour, which is not that of selfish gain and pecuniary advantage.

When that great Scottish physician, Sir James Y. Simpson, was borne to his last resting-place, what constituted his crown of glory? Was it that men counted up the sovereigns and noblemen who had called him to their bedsides, and had poured wealth into his hands in payment for a skill that might give them back life and health? Or was it that Edinburgh emptied her wynds and alleys of her poor to weep over the bier of the man whose ear had been open to every cry of their misery?—*Rev. Prof. R. E. Thompson.*

GOING TO BED IN JAPAN.

Going to bed in Japan is rather an indefinite expression for anyone accustomed to sleep between sheets and blankets and upon snowy pillows. In fact, you do not "go" to bed at all, but the bed, such as it is, simply comes to you; and the style of preparing for the night is about the same wherever you are. First, a cotton-stuffed mat is laid anywhere upon the floor, and a block or roll is placed at one end to rest (?) your head upon. Then you lie down, and a cotton-stuffed quilt is thrown over you. This quilt is like a Jap dress on a big scale, with large and heavily-stuffed sleeves, which flap over like wings. But the difficulty is

that these capacious sleeves, with all the rest of the bedding, contain unnumbered legions of voracious fleas hid away in recesses known only to themselves, but which only wait till you get fairly nestled in sleep, when they begin their onslaught on their defenceless and helpless victim. Awakened by the merciless havoc they are making upon you, it is in vain that you roll and toss and shake your clothes till you are wearied out—that only increases the vigour with which they renew the battle; and though you may spend hours in the faint glare of the primitive oil-lantern which is set in one corner of the room, and strive to rid yourself of the tiny tigers that are devouring you, it is all to no purpose, and you sink down at last asleep. But you are soon awakened again, only to undergo the same tribulation, and the long hours of night pass away as you pace up and down the narrow limits of the room, listening to the snoring of the dozen or more of the tough-hided sleepers that surround you, and peep through the sliding shutters of the house to see if the day is breaking or not. You cannot lie down again, for the floor is crawling with the creatures you dread, and you cannot sit down, for there is nothing to sit upon, and such a thing as a chair was never heard of in that region.

AN AMERICAN'S IDEAL.

BY WILL M. CLEMENS.

A commonplace young girl;
A decidedly rare young girl;
Stay at home night,
Do what is right,
Help-her-old-mother young girl.

A hard-to-find young girl;
A reader-of-fact young girl;
An extra poetical,
Anti-aesthetical,
Care-nothing-for-novels young girl.

A minus-her-bangs young girl;
A show-all-her-brains young girl;
With an unpowdered face,
One that don't lace,
A dress-for-her-health young girl.

An up-in-the-morning young girl;
A help-with-the-wash young girl;
One that can rub,
Not afraid of the tub,
A roll-up-her-sleeves young girl.

A quiet-and-modest young girl;
A sweet-and-pure young girl;
An upright, ambitious,
Lovely, delicious,
A pride-of-the-homo young girl.

A remarkably-scarce young girl;
A very-much-wanted young girl;
A truly-American,
Too-utter-paragon,
The kind-that-I-like young girl.

—N. Y. Independent.

LONGFELLOW.

A gentleman, who passed an evening with Mr. Longfellow a fortnight before his death, says that the poet, in spite of his indisposition, entered the room with a light step and smiling face. He was never more genial, his demeanour being almost gay as he related some of his early experiences.

"He told me," writes this friend, "of his early poems and of the payments which he did not receive. 'Psalm of Life' and 'The Reaper' appeared in the 'Knickerbocker,' and were never paid for at all. 'The Voices of the Night' were printed in the 'United States Literary Gazette,' and the compensation was—dubious. Mr. Longfellow, having been informed on one occasion that the sum of thirteen dollars was subject to his order (for two prose articles and one poem), declined the so-called honorarium, and accepted a set of Chatterton's works, which are still in his library. For his contributions to another periodical, covering some two or three years, he got—a receipted bill for the same period."—*Watchman.*

BOOTS VS. THE GUILLOTINE.

During the French Revolution, a feuilletoniste named Schlaberdorf, who possessed considerable ability as a writer, by heartily espousing the cause of the Girondists in all that emanated from his pen, rendered himself obnoxious to Robespierre, and at the dictation of that fierce leader was incarcerated.

When the death-cart, one morning, came to the prison for its load of those who were that day to be mercilessly butchered, Schlaberdorf's name was on the list of the victims. The jailor informed him that such was the case, and he dressed himself for his last ride very nonchalantly and—he was extremely fastidious as to his personal appearance—with great care. His boots, however, he could not find. Here, there, everywhere, assisted by the jailor, he looked for them to no avail.

"I am quite willing to be executed," said he to the jailor, after their fruitless search, "but really, I should be ashamed to go to the guillotine without my boots. Nor do I wish to detain this excursion party," smiling grimly. "Will it make any difference if my execution is deferred till to-morrow? By that time I shall probably succeed in finding my boots."

"I don't know that it will matter particularly when you are guillotined," replied the functionary. "Suppose we call it to-morrow, then?"

"All right;" and the jailor allowed Schlaberdorf to re-

main, not unwillingly, as, owing to his universal good humour, he was especially liked by jailor and prisoners.

The following morning, when the cart drew up before the prison door for its "batch" of victims, Schlaberdorf—dressed cap-a-pie—stood waiting the summons of the jailor to take his place therein. But his name was not called that morning, nor the next, nor the fourth, nor, indeed, ever again; for, of course, it was believed he had perished on the original morning.

Till the sway of Robespierre had ended, he remained in prison; then he regained his liberty, as did the rest of those whose heads had not fallen beneath the blood-stained axe. *Youth's Companion.*

"A SCREW LOOSE."

I have written so many articles about the importance of attending to matters on the farm "in the nick of time," when "one stitch will save nine," if taken at the proper moment, that I am half afraid to write again on a subject which so many of our agricultural writers have rung the changes on, for fear some one will say it is a hobby of mine, and that so much talk about keeping everything in "apple-pie order" is quite likely to prove "too much of a good thing." But I have just seen so pertinent an illustration of the folly of neglecting what ought to be done now, until some time when there was nothing else to do, that I want to make use of it for the benefit of those who can profit more by a narration of actual experience than they can by abstract ideas.

One of my neighbours has a drag-saw. During the winter he goes about, from house to house, sawing wood.

Last week I had him engaged to saw wood for me. The logs were well skidded. Everything was conveniently arranged.

When he came he looked over the woodpile, and his face was expressive of satisfaction.

"I can put in a good week's work here," I heard him tell his boy. "They've got everything handy. There won't be anything to bother us. We can saw at least twice as much here as we did at the last place. We'll make a good thing out of it, if we don't have any bad luck."

The machine was set, and by noon on Monday everything was in readiness for operation. I went out to the wood-lot directly after dinner to see the machine started up.

Just before they began to saw, the boy came to his father and said:

"There's a screw loose on the lower part of the saw-frame. It ought to be fixed now; hadn't it?"

"Well, yes, I s'pose it had," was the reply. "But we won't bother with it now, I guess. I'll fall at it and tighten 'em all up after we get through to-day."

Now, it would not have taken ten minutes to have examined the entire machine and tightened every bolt that was loose. But no—by-and-by he would attend to it; there was more important business on hand now.

Behold the result! About an hour after they began to saw there was a grand crash, and matters came to a sudden standstill.

On investigation it was found that the "loose screw" had caused the mischief. The frame was broken, and the saw also.

"What does the damage amount to?" I asked.

"Well," was the reply, as the owner looked the machine over, "it'll take just about twenty-five dollars to get a new saw and frame. There's that much in cash that's got to go before we can do anything more, and it'll take about four days for the saw to come; so there's the loss of four days' work of myself and team. Figuring them in at three dollars a day, and that's putting it low, there's twelve dollars more, making thirty-seven. You can safely reckon on the accident costing about forty or forty-five dollars. That's the way the profits go. But if I'd seen to that loose screw it wouldn't have happened. That's what always comes of letting things go when you know they ought to be attended to."

I draw no morals. I leave that for the reader to do.—*Eben E. Rexford, in N. Y. Christian Union.*

THE centennial anniversary of the birth of Frederick Froebel, the founder of the Kindergarten school, was celebrated in Boston and other places last week.

RALPH WALDO EMERSON, the poet and philosopher, died at his home in Concord, Mass., on the 27th ult., in the seventy-ninth year of his age. The funeral took place on the 30th.

THE marriage of Prince Leopold, Duke of Albany, Queen Victoria's youngest son, to Princess Helena of Waldeck, took place at St. George's Chapel, Windsor, on the 27th ult.

THERE is a project for settling, in New Jersey, 500 families of Hungarian immigrants of the better class of intelligent, honest, well-to-do farmers, who will locate in villages of from 50 to 100 farms.

CUBAN sugar-planters are looking with expectation to the draining of the Okeechobee lands in Florida, with the idea of removing their business thither, making Florida the great sugar-producing State. They will thus avoid the enormous Cuban taxes, as well as the duties now laid on it.

SENATOR GEORGE, of Mississippi, stated last week that the area recently flooded by the Mississippi was as great as the State of Maine, or as Delaware, Maryland and Western Virginia, and that the country afflicted is so extensive that bananas are produced in one section of it and ice at the other.

THE English Channel tunnel is to be twenty-two miles long, eighteen by twenty feet wide, and have two railroad tracks. From each end there will be a down grade of one to eighty for four miles and then a rise of one to 2,460 to the centre. The rock and earth to be taken out would make a pyramid as large as the great one in Egypt. It is estimated that the yearly receipts will be £850,000 from passengers, £300,000 from freight and £50,000 from mail. If expenses take forty per cent. of this, there will be £732,000 left for interest on the capital.

YOUNG CANADA.

SOMETHING TO DO.

Think of something kind to do,
Never mind if it is small;
Little things are lost to view,
But God sees and blesses all.

Violets are wee, modest flowers,
Hiding in their beds of green,
But their perfume fills the bowers,
Though they scarcely can be seen.

Pretty bluebells of the grove
Are than peonies more sweet;
Much their graceful bloom we love
As they blossom round our feet.

So do little acts we find,
Which at first we cannot see,
Leave the fragrance pure behind
Of abiding charity.

A LION STORY.

"I can't, I can't, I CAN'T!" said Willie, reaching a climax of emphasis and emotion, as he landed his arithmetic in his mother's lap. She was sitting on the opposite side of the study table, patiently filling up the missing heel in one of our hero's stockings.

"What is it now, dear?" Her voice was like the soft patter of rain, and the light in her eyes as the sweet shining of the sun after a flash of lightning and a clap of thunder.

"I am going to do all *my sums* by subtraction. I never can learn multiplication—never, never!"

"You had better go to bed, dear," she replied, thinking to cut this Gordian knot of nevers and can't's with the sword of rest.

"Without my story, mother!" (now, the story had been the promised reward for the yet unsolved problem in arithmetic.)

For once, she was better than her word, and surprised Willie by saying, "Well, I believe I will tell you a lion story to-night." Willie looked up with a smile of expectation and interest, in which there lurked no remembrance of certain snakes and bears with which she had been wont "to point a moral, or adorn a tale."

"There lived once in a village—well, a village where there were *lions*—a poor seamstress and her little boy, who was all she had in the world. 'When Freddie gets to be a man,' was a sort of oasis looked forward to in the desert journey of her life."

A light came into Willie's eyes as she said this, for she had borrowed her illustration from his last lesson in geography.

"Late one evening," continued she, "the poor mother said: 'Freddie, I *must* have that jacket pattern, and you will have to go to the other end of the village for it.'"

"Do boys wear jackets in lion countries?" interrupted he.

The corners of his mother's mouth twitched a little, as she proceeded with more caution:

"Yes, sometimes. As I said before, it was late, and nearly dark. Freddie met his mother's request with a frown, and started with reluctant steps. Presently he ran back with eyes full of fright, crying out, 'There is a lion in the street!'

"His mother laid aside her work, rose hastily, and looked anxiously in the direction indicated, but could see nothing but the trees and houses. The sad, care-worn look

never left her face that night, though in the street she was sure there was no lion.

"The village had been infested for many years by two much-dreaded lions. One was fierce and strong, roaring along the highway at noon; the other, cowardly and hungry, crept from behind fence corners and stumps to spring upon little children in the dark."

"Oh! mother, and ate them up?" said Willie, with a shudder.

"Yes, all that was *good* in them; their character, their industry, their manliness; for the great savage lion is, 'I won't,' and the little cowardly sneak is 'I can't.'"

"Sold again," said Willie, with a sigh of disappointment; but his look of interest came back as his mother took down the big Bible and asked him to turn to Prov. xxii. 13. He read aloud: "The slothful man saith, There is a lion without, I shall be slain in the streets."

After they had talked about it awhile, she drew nearer, and stroking his tossed curls and smoothing the wrinkles from his flushed brow, she whispered tenderly:

"Oh! Willie, I am so much afraid of 'I can't' for you. Face the sneaking lion like a man, and he will skulk away to the woods." Then she added playfully, "If you like subtraction so much, set your duties down in a row, and write a brave 'I will' under every one of them. 'I can't' will lead you into multiplication, and keep you there all the days of your life." Willie didn't think this much of a lion story, but 'I can't' didn't sneak round quite as often when he had tasks to accomplish.

THE QUEEN'S REPARATION.

In 1882, the Society Islands, which had previously been governed by chiefs according to their own pleasure, came under the influence of the Christian religion. One of the first things the islanders did was to assemble and agree upon a code of laws, which were to be equally binding upon the King and his lowest subject.

A few months after the adoption of this code, the Queen of Tahiti visited Huahine. Her attendants requiring a piece of timber, she directed them to cut down a bread-fruit tree which grew in a garden near the place where she was resting with her people.

In the evening, when the owner came home from his work in the fields, he saw what had been done. There lay the branches strewn around. There was the bleeding stump. But the tree, his pride and delight, was gone.

Informed by his neighbours that the Queen's men had cut it down, he went at once to the magistrate and lodged a complaint against her Majesty. The magistrate directed him to appear at sunrise the next morning, and bring witnesses to prove his charge. The Queen also received a summons to attend.

At the appointed hour, Ori, the judge, was seated on the ground beneath a mighty tree. On a finely woven mat before him reclined the Queen, surrounded by attendants. Beside her stood the peasant, her accuser, and back of them all a number of men who seemed to be police officers.

Turning to the plaintiff, whose name was Teuhe, Ori asked for what purpose they were assembled. The poor man replied:

"O magistrate, in my garden there grew a bread-fruit tree. Its shelter was thrown over my cottage. Its fruit supported my children. Yesterday some one came and cut it down. They tell me the Queen sent him to do so. What I desire to ask is, whether the law was made only for kings, or for poor men, too?"

The magistrate, turning to the Queen, asked if she had ordered this. She answered, "Yes." He then asked if she did not know that they had laws. She said, "Yes;" but she was not aware that they applied to her. The magistrate asked if in those laws—a copy of which he held in his hand—there were any exceptions in favour of chiefs, or kings, or queens. She answered, "No," and despatched one of her attendants to her house, who soon returned with a bag of money, which she threw down before the poor man, as a recompense for his loss.

"Stop," said the justice; "we have not done yet." The Queen began to weep. "Do you think it was right that you should have cut down the tree without asking the owner's permission?" continued the magistrate. "It was not right," said the Queen. Then turning to the poor man, he asked, "What remuneration do you require?" Teuhe answered, "If the Queen is convinced that it was not right to take a little man's tree without his permission, I am sure she will not do it again. I am satisfied; I require no other recompense." His disinterestedness was applauded, the assembly dispersed, and afterward, I think, the Queen sent him privately a present equal to the value of his tree.

DON'T GIVE UP.

A gentleman travelling in the northern part of Ireland heard the voices of children and stopped to listen. Finding the sound came from a small building used as a school-house, he drew near; as the door was open, he went in and listened to the words the boys were spelling. One little boy stood apart, looking very sad. "Why does that boy stand there?" asked the gentleman. "Oh, he is good for nothing!" replied the teacher. "There is nothing in him. I can make nothing of him. He is the most stupid boy in the school." The gentleman was surprised at his answer. He saw the teacher was so stern and rough that the younger and more timid were nearly crushed. After a few words to them, placing his hand on the head of the little fellow who stood apart, he said: "One of these days you may be a fine scholar. Don't give up; try, my boy—try." The boy's soul was aroused. His sleeping mind awoke. A new purpose was formed. From that hour he became anxious to excel, and he did become a fine scholar. It was Dr. Adam Clarke. The secret of his success is worth knowing: "Don't give up; but try, my boy—try."

THE Prince and Princess of Wales recently gave a small juvenile party at Marlborough House to celebrate the fifteenth birthday of their eldest daughter, Princess Louise. The children invited came at five o'clock in the afternoon and left at eight—very sensible hours.

TORONTO WHOLESALE MARKETS.

OFFICE RURAL CANADIAN, Toronto, May 12th, 1882.

CATTLE.—The demand has been active and the supply insufficient. Prices continue very firm, with good butchers' cattle selling at about the same prices as choice export steers.

FLOUR AND MEAL.—Flour—Stocks in store, 4,527 barrels, against 6,100 barrels last week and 6,948 barrels last year.

GRAIN.—Stocks in store 335,548 bushels against 482,476 bushels last week and 883,510 bushels at a like time last year.

PROMISORS.—There has been a little more activity the past week, and, with the exception of butter, prices are strong.

WOOL.—There is no demand for fleece, and prices are nominal at 21c. to 22c.

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