

VOL. X. { WILLIAM WELD, Editor & Proprietor. }

LONDON, ONT., NOVEMBER, 1874.

{ \$1 Per Annum, Postage Prepaid. } NO. 11
Office—Dundas-St., Opp. City Hotel.

New Seed Wheat.

The Scott wheat reports continue most favorable from all who have raised it. In the dissemination of this wheat alone we believe we have increased your wealth many hundreds of thousands of dollars. We can instance a single individual farmer who made over 500 dollars more from this wheat than he could from any other variety. He only purchased one bag of it at first. We can also cite many instances where farmers have raised between 100 and 200 bushels more from this variety than they could from any of the other varieties. We have not said one word too much in its favor.

STONE'S WHITE SPRING WHEAT.

This wheat has proved itself unfit for us; we were afraid when Mr. Stone introduced it to us that it would not answer. We are glad no one lost much by trying it. We have in our office

TWO NEW VARIETIES OF SPRING WHEAT.

They have been forwarded to us from different parts of Canada. One is a red wheat; the heads are long, the straw is stiff, the chaff is red and has a long beard on it; the grains are rather wide apart, nearly as far apart as the Rio Grande or McCarling wheats. The grain is very different, being short and plump. This wheat is said to have been raised from one head that was picked from a field of common wheat. The party having it does not know its name.

The other variety is a white spring wheat having a red chaff and small heads growing from the main head; it has a very peculiar appearance. This wheat, we believe, is called the Mummy wheat. It was sent from the East Indies. A few grains were sent in a letter a few years ago to a person in Canada.

We would like to obtain information from any of our readers regarding either of the above wheats. If any one among you could know anything about either of them, we should be happy to hear from you. They are both reported to us as yielding large crops, and very high prices are asked for them. We shall give more information about them in the spring; to be correct, we ask for any information about them, as we have not grown either of them.

The Oil Business.

MONOPOLY, EXTORTION AND ROBBERY.

Farmers, it is high time we should awake our interest. Since the receipt of the letter, headed "Light on the Oil Question," which appears in our correspondence column, we have made some inquiries into the great trouble. The facts are these:

Our burning oil is only worth 12 cents per gallon. It can be sold at the refineries at 15 cents per gallon, leaving a fair profit for producers and refiners; through monopoly and legislation we are compelled to pay from 25 to 30 cents per gallon. There is an unlimited supply of crude oil procurable at the

wells; the crude oil now is worth only 60 cents per barrel; a barrel will make 30 gallons of refined oil and 5 gallons of lubricating oil and benzine. In the States a superior oil sells for 12 cents per gallon, and the American oil could be sold in Canada for 16 cents per gallon.

To prevent this, representations have been made to the Government, such as to induce a duty of 10 per cent. being put on this American oil. This has been done to enable monopolists to pick our pockets. There is no fear of American oil being imported if our own oil can be procured. To prevent us from having our own oil at a fair price, a monopolizing company has been formed of a few cunning citizens, and nearly all the refineries leased, purchased or closed up. This company, on purpose to make us pay such prices as they choose, has perverted the law of supply and demand. Thus we have to pay nearly a half more to this company than we should pay if this monopoly was not in existence.

To have the refineries closed and leased by monopolists is not right. Our only remedy at the present time is to apply for the removal of the duty, which would at once reduce the price without the necessity of importing. This would save from \$1 to \$10 to every family in Canada, which sum otherwise would only go to the building up of colossal fortunes for monopolists at our cost and at a heavy loss to the progress of the Dominion.

The Short Horn Sales.

There has been a smaller number of Short Horn sales this fall than usual. The reason of this is that many sold largely last year, and are now increasing their herds. The principal sales that have taken place this past month have been those of Miller & Thompson, of Whitby, and G. Brown, at Brantford. The prices realized have not made a high average; but few American buyers attended the sales this year. There were important sales going on at the same time in the States; no doubt this was the cause of some Americans not attending.

The Government purchased some of the most expensive animals at Mr. Brown's sale at Bow Park farm.

Some of the Short Horn sales in England have gone off remarkably well. Higher prizes have been paid than ever before; the great run appears to be more for certain pedigrees than for beauty of animals.

A NEW HERD BOOK.

The Americans are about to issue another Herd Book. There will be great attempts made to depreciate all kinds of stock that have not just certain strains of blood in them. The fact is, in our opinion, that these particular breeds are only in the hands of a very few wealthy monopolists, and they wish to make every means subservient to the elevation of the value of these classes. Money has a mighty power. These high-priced animals are often used like the shuttlecock, thrown for one, two or

three years to one man at one price, and bought back again at a higher figure; sometimes these great prices are not actually paid. The Durham ring is now taking the place of the race course for speculation; it is a good substitute—a safer game to play and a more beneficial one.

London Exhibition Grounds.

In our September number we called attention to the fact that these grounds would be sold unless immediate action to prevent it was taken. They were advertised to be sold in lots on Monday, the 21st of September. We had a petition drawn up on Saturday, and took it to many of the citizens. Nearly all whom we asked signed it. We presented it to the mayor; he had the sale postponed. We are now in hopes of having the grounds retained. It would be much to the loss of the farmers and citizens to dispose of them. They are considered by all who have visited them to be the best grounds in Canada. We think in assisting in staying the sale of these grounds we have done a good service to the interests of agriculturists and the country generally.

The Exhibition at Ottawa.

The Provincial Exhibition is to be held at Ottawa next year. Ottawa has asked to have it held there for several years, and we consider it right that she should have it, as the inhabitants of that section of the country have been paying towards its maintenance a long time. The Exhibition should be looked on as a travelling school. It will do good to the inhabitants around Ottawa. It has done so much good in the western portion of Canada that the young schools, taking pattern from the old one, are in many respects surpassing the parent institution.

The Hon. J. Skead guarantees that the Association shall not be a loser by going to Ottawa. It is our impression that as good an exhibition will be held there as there was in Toronto this year. Many of our western exhibitors and visitors may not attend, but with those that attend from the west and the eastern exhibitors that will be there, in many departments the exhibition will surpass the last one held here.

The greatest drawback, in our opinion, will be the knowledge that Ottawa is so expensive a city to live in. Charges for reasonable accommodation will be almost ruinous, unless more efficient measures are taken to accommodate the public. In Toronto this year the houses that accommodate farmers doubled their charges from 25 cents to 50 cents for meals or bed. The meals provided might give satisfaction, although not half equal to such as are usually provided at other times; the sleeping accommodation is always lacking, and should be in some way considered by those who assemble the mass together.

Ottawa charges of \$3, \$4 and \$5 per day at common times, with the prospect of even a raise, are subjects that will be considered by those desirous of attending. We hope we may be able to give to our readers some

account of steps being taken to provide sleeping accommodation at 50 cents or \$1; we know of persons who had to pay such charges as 50 cents for a seat in a chair, and one 50 cents for sitting on a salt barrel at night. One of these parties would have willingly given \$4 for a good bed, but could not get one.

The Provincial Exhibition.

This Exhibition being held this year in the great centre of business of Ontario, we should have expected it to have surpassed any of the previous ones. Nearly every paper in the Province has spoken highly of it, and lauded it far above its deserts in our opinion.

We will describe it as it appeared in our eyes. As an exhibition it fell far short of any we have had for many years; such a display of empty stock pens we never before witnessed at any exhibition; had they been pulled down and burned visitors would not have been so much disappointed as by passing along them and finding nothing there. In heavy draught horses the display was good; a fair display of roadster and carriage horses was seen, but not nearly as good an exhibition in this class as might have been seen at the Western Fair in London. Durhams, as a show, were no where in comparison to previous exhibitions. Durham men say the quality was superior; our eyes failed to see in what this great superiority consisted; it might be in the name of the blood that ran in the veins of the few animals exhibited. Very few of our breeders exhibited. Quantity was very deficient.

Sheep were good, but not as numerous as they should be. Some were only shown in small numbers, and no marked improvement in any class of them. In some classes the stock was far inferior to other exhibitions.

There was a good display of implements and machinery, but on the whole this department could not be claimed to excel previous exhibitions.

The grain department was very meagrely represented.

Vegetables, fruits and flowers.—Many a county or township exhibition we have seen would throw this department entirely in the shade, both in regard to quantity and quality, except perhaps in prizes for large quantities shown by professional nurserymen.

In cheese and butter, local exhibitions are often quite as good.

In the fine arts and ladies' departments the exhibition could not be claimed as being superior to previous exhibitions.

But the great and grandest point of all is that it was a pecuniary success; the weather was fine, the attendance was large, and the cash receipts were most satisfactory.

It may be asked:

WHY WAS THIS EXHIBITION INFERIOR TO PREVIOUS EXHIBITIONS?

One great reason was because of the unusual drouth during the latter part of the summer, causing pastures to be bare and

T I G H T
B I N D I N G

ings of this body if we should think it was acting against your interests; whereas, if holding an office in it, we should not be free to condemn our own work.

As we converse with those for and against the Grange movement, we may perhaps see where good or harm may be done. Possibly some bad results may follow in some places at some future day. Everything that man does may result in evil; at present we are satisfied the good effects will counterbalance a great amount of unseen evil. We would like for the good of the order, to impress on the minds of those that may be zealous in the cause, to keep strictly secret the trade discounts offered by dealers and manufacturers; you should not let outsiders know at what price you can procure any implement. If you do it is breaking faith, and you would deserve expulsion from the order. When you obtain an advantage in price you may hear what others pay, but do not, by answering side questions, let outsiders know what you pay. Especially be careful not to let it be known what dealer or manufacturer is offering you discounts, as it is your duty not to injure, but aid those who aid you.—Should you wish to have fuller particulars, you can address the Secretary of the Dominion Grange.

We would also caution manufacturers and dealers to take no heed of any persons who may represent themselves as belonging to the order, and desire a discount on that account. All business will be done through the Secretaries or agents of the Granges.

Below is the list of officers elected at the annual meeting of the Dominion Grange at Toronto:

MASTER—S. W. Hill, Ridgeville, Ont.
 OVERSEER—H. Leet, Danville, P. Q.
 LECTURER—A. Gifford, Meaford, Ont.
 STEWARD—Sam. E. Phillips, Schomberg, Ont.
 ASST. STEWARD—H. S. Lossee, Norwich.
 CHAPLAIN—W. Cole, Sarnia.
 TREASURER—Adam Nichol, London.
 SECRETARY—Thomas W. Dyas, London.
 GATEKEEPER—L. Galer, Dunham, P. Q.
 CERES—Miss Caton, Napanee.
 POMONA—Miss Whitlaw, Meaford.
 FLORA—Mrs. B. J. Palmer, New Durham.
 LADY A. STEWARD—Mrs. Lossee, Norwich.

EXECUTIVE COMMITTEE.

W. S. Campbell, Brantford,
 J. Manning, Schomberg,
 Capt. J. Burgess, Masonville,
 C. C. Abbott, Abbott's Corners, P. Q.
 B. Payne, Delaware.

Granges Organized Since Our Last Issue.

- 42—MONTROSE GRANGE, Chas. Gurney, Master, Paris; Wm. B. Underhill, Secretary, Mount Vernon.
- 44—EUREKA GRANGE, Edw. Jeffs, Master, Bond Head; Wm. S. Fraser, Secretary, Bradford.
- 45—LAKE SIMCOE GRANGE, Chas. Cross, Master, Leffroy; Jas. Allen, Secretary, Church Hill.
- 46—BERTIE GRANGE, Peter Learn, Master; James Moore Secretary, Ridgeway P. O.
- 47—ARGENTEUIL GRANGE, G. W. Bond, Master, St. Andrews, P. Q.; Robert Gordon, Secretary, La Chute, P. Q.
- 48—BROCK HOLME GRANGE, M. Olmsted, Master; R. S. Stevenson, Secretary, Ancaster, P. O.

The Secretary of the Dominion Grange has just issued the 1st trade circular, showing discounts offered by manufacturers and dealers to Patrons, and is sending it to the Secretaries of Granges on receipt of their quarterly report. The circular is solely for the use of members of the Grange, and none of the information contained in it may be divulged.

Recent Decisions.

The Overseer acting as Master can give the annual word.

Singing of the opening song as a part of the opening ceremony should not be omitted. In the Kansas Farmer, Bro. Popenoe says: "Children may be admitted to the Grange if they are not too big or sharp."

A Master's resignation tendered orally and accepted by the Grange is sufficient, but it would be better to have it in writing and filed among the papers of the Grange.

A man following another pursuit, though he may own a farm tilled by members of his family, is not eligible to membership in the Grange.—Master Brown, Michigan State Grange.

A Master can be tried by the Grange, as I know of no other tribunal that would have the right to try him, and I think a Grange should have power to protect itself.—Master Jones, Indiana State Grange.

When the Master is absent, the Overseer should take his place and appoint any good working fourth-degree member Overseer. If a Past Master be present the Overseer may keep his own place and ask the Past Master to take the Master's chair.

Grange Items.

The United States Department of Agriculture estimates the saving to the Patrons in the West in the purchase of supplies which has accrued from the establishment of the Grange, at between \$6,000,000 and \$8,000,000.

Missouri Patrons have a "Grange Packet Line," run in the interests of the farmers at reasonable rates. If you cannot get others to do your work for a fair price, do it yourself, is the principle upon which they work.

The New Jersey Granger thinks that the Grange movement is an aid to politicians, in that it gives them a chance to wear out their old clothes.

It has been established at last that a Patron may run for office and get beaten if he chooses; and it makes him no less a Patron if he should happen to get elected.

German Granges are being organized in Wisconsin.

The Newton County, Indiana, Patrons have organized a deposit and loan association.

A Mississippi Grange is offering twenty-five dollars for the best corn and the largest number of bushels from one acre of land; fifteen dollars for the best and largest number of gallons from one acre of cane, and ten dollars for the largest and best hog of any age raised in Winston County.

The Patrons all work under the same charter, the same constitutions and by-laws, peaceably and in order, and they work systematically and harmoniously, and with a unity of purpose that makes them the most powerful organizations in the world. East Williams Grange, No. 28, reports an increase of 35 new members in two months.

Drought and the Garden.

We have had some rain of late—two or three times a right good rain-fall, and still the ground cannot be said to be wet. It had become so thoroughly dry, that when every little particle of soil had its share of the longed-for drink, every clod had been slaked, and every pore had taken its portion, the ground, as we turned it up, seemed but a little moist. We may indeed say we have passed through a drought. Have we profited by it? Has it taught us any lessons such as not to be forgotten? One lesson, at least, the wisest learn at every time, that they have much to learn. The garden should make two payments, if well attended to—it should return for the labor and care bestowed, pleasure to the owner and tiller, and also by its fruits give a profit in its yield of many fold. Though but an amateur gardener, I have had the two payments, even in this season of drought. I might have been more successful had I been better prepared, and this is the summing up of the lesson the season has taught. Prepare in the fall and the early winter for the coming spring and summer. No half-preparedness will suffice. Prepare with all thoroughness. Of my trees, though young, I lost not one.—My shade trees were many of them only planted in the spring of '73. In the fall I prepared for the winter, and this preparation not only saved them in that season, but it also was a means of their flourishing through the drought of summer.

The mulch that I used was a sod covering the soil as far as the roots extended, and it not only saved them from the frost, but when broken and mixed with the soil in the spring, it aided their growth in the summer. There was a sufficient depth of good mellow soil for them to draw food from, and they had the full benefit of every night's dew. The advantage of planting in well-prepared soil, and continued care after the planting, cannot be too highly estimated. Some of my young trees made a growth of from 12 to 18 inches during the season. Of these were oak, linden, balsam, cedar and elm; the growth of apple, locust and silver poplar trees was much greater.

Had I ever entertained a doubt of the benefits of good, thorough fall tillage and heavy manuring, the results of this season would be sufficient to remove it. Half tillage never pays for itself. Every garden should be made to have at least twelve inches of good, garden soil. The plants can then, in the driest sea-

son, draw upon a source unexhausted by the drought, and while others are withered and scorched, they will flourish.

Ticks on Sheep.

The loss that we are sustaining by these little pests is almost incalculable. The loss in weight of mutton and wool, the loss from poverty, the loss of lambs in the spring for the lack of nourishment that has been sucked from the dams, are all subjects that we should endeavor to guard against. A little judicious expenditure and care at this season may save a



hundred times the cost. Miller's Tick Destroyer is an efficient article. We have tried it. Examine your sheep and see that no ticks are on them. If you find any, send to H. Miller & Co., Toronto, for a box of the Destroyer; it can be mailed to you for 40 cents. Instructions how to use it are sent with it.—We can also supply it to those that call or send to us for it.

Prize Essays.

We now propose giving two prizes, one of \$3, another of \$2, for the 1st and 2nd best essays written on the subject of

FENCES OR NO FENCES.

This we think will be an important question, and one that we shall all have to consider. The essays to be in this office by the 15th of November.

To Our Friends.

We are about to make a very great improvement in the ADVOCATE for 1875; also to extend our business in other ways. If any of you have active, energetic sons or friends that would like to have easy and pleasant employment from the middle of December through the winter, and probably a continuance, at a good salary, you might mention this to them. They might also communicate with us.

Mr. Edward Winnett, of London Township, bought "King of the West," the winner of the 1st prize for Durham calves at the Western Fair.

FARMING AND FARMERS' MARKETS IN ENGLAND.—From "Agricultural Prospects," in the Mark Lane Express, we take the following extracts:—From Somersetshire the advice runs thus: Our yield of wheat is pretty good, ten to twelve sacks per acre, and some fourteen or fifteen sacks, here and there. Yield of barley better than was expected. From Norfolk: In the past weeks we had frequent and copious rains, which have proved most beneficial to the root crops and grass lands. From the East Riding of Yorkshire it is stated: The weather has been favorable for the in-gathering of the harvest. * * Seldom or never has a finer period been experienced for the farmers getting in their grain. From the east coast of Scotland: If the weather keeps dry, we think the potato crop will be a good and sound one. There are, however, some complaints of disease, chiefly from the north of this country. Smut was never more prevalent, but the dry weather has prevented so much discoloration as is often the case in smutty seasons. The great feature this season is the comparatively short proportion of white wheat. It is very scarce indeed, and commands an unusually relative high price. There will now be a considerable anxiety to secure the choicest and most favorable samples of seed wheat, all of which can be obtained of a very superior quality. Farmers will do well to sow a greater breadth of white descriptions, these being more wanted this year than usual.

Notes of the Garden and Farm.

ORIGINAL AND SELECTED.

A MARKET FOR CANADIAN BEEF.

Nothing has tended so much to retard the improvement of agriculture in Canada as the very low price received by farmers for their fat stock. The only market was the home one, and the supply exceeding the demand, the prices were necessarily very low, and farmers were consequently forced to rely on the grain crop. Hence wheat followed wheat in continuous succession, till the soil was exhausted of its original fertility, and the means of restoration, so effectual in such farming countries as Britain, were not resorted to. The stores of rich manure from fat cattle, which is computed to be of itself sufficient remuneration for their feeding, were wanting, and the produce of our fields had fallen off one half from what they were when the country was yet new.

We rejoice to see brighter prospects for the farmers, to hear of the demand in England for meat, and the prices so high that efforts are made, and with every probability of success, to import meat from Canada. For this purpose a company has been formed with a large capital to purchase fat cattle in Canada, and slaughter and ship them to England. We learn from the Sherbrook News that this company has contracted to construct a building in that town for the purpose, and that they intend to erect another building before the winter (now at hand) of 330 ft. by 80 ft., two stories in height. The company are going to work in earnest, and seem determined to lose no time in completing the necessary structures. Canadian beef slaughtered here has had more than one trial in England, and in every respect compared not unfavorably with the famous sirloins of Old England. From a comparison of prices in the Canadian and English markets, the company may expect the business to be fairly remunerative, and the good market opened for our fat stock will be a much needed stimulus for the improvement of our agriculture by the persevering in the breeding and importing the best stock, and growing for their feeding the best grasses and root crops.

DOES DRAINING PAY?—We read, says the New York Tribune, of one Ohio farm which several years since was unproductive and ageish. Twenty bushels of inferior corn to the acre, and from five to ten bushels of wheat was all that could be raised. Sheep would die about as fast as they could be produced. Now it is underdrained with five miles of tile, and yields eighty bushels of good, sound corn, and from twenty to forty bushels of superior wheat. On grass lands the difference in quantity is not great, but the quality has been greatly improved. Chills and fever have disappeared, and sheep raising is profitable. So satisfactory have been the results of the draining on this estate, that the owners intend to buy, at least ten miles more of 'crockery.'

THE DEMAND FOR BARLEY.—From the Massachusetts Ploughman: "While this is the great grain-producing country of the world, the bulk of the barley which is used here is imported from other countries, and the demand grows with every year. From Canada alone, during the past four years, we have drawn a yearly average of nearly 4,500,000 bushels, while owing to a short crop there last year, large imports were made from Europe. The New York Bulletin gives figures to prove that this cereal is much more profitable than wheat raising, and thinks that the matter should commend itself to the attention of farmers. The market is enlarging yearly, the prospect being that England alone will have an annually increasing demand.

CONTINUED HIGH PRICES FOR SHORT HORNS.

We learn from the English papers that the demand for Short Horns and the high prices are unchanged. The London Telegraph says: Large prices were obtained at a sale of Short Horn cattle belonging to Mr. E. H. Cheney, Gaddesby Hall. Nineteen lots were sold for upwards of £10,000, one of the animals fetching as much as 8,500 dollars, and another 8,925 dollars.

FALL WHEAT.—The fall wheat is looking very well despite the lateness of the seeding occasioned by the drought. The prospects are that it will be well forward ere winter sets in. Many pieces are now well covering the land, and are already fit for a covering of snow.

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Correspondence.

Ottawa, Oct. 10, 1874.

The Exhibition which took place on Sept. 15th, 16th and 17th, at Ottawa, was a general success. People that have been eye witnesses to the previous Exhibitions, consider this the best that has ever taken place on the grounds. The grounds on which the Fair was held were in good order; they have one drawback, however, in being too small. After riding two miles into the country one would not suppose such would be the case.

As the animals were brought into the ring their appearance showed that the people in the vicinity of Ottawa have not lost all their taste for well bred and well developed stock, as the people in western Ontario generally believe, on account of their living so near the French. The quantity was not large; we would have liked to have seen more exhibitors. It seemed as though there were only about animals enough to take the premiums, and that they were all sure of some prize. Each class of horses seemed to be about equally supplied with animals.—The Durham cattle were of good quality and were in good condition, rather better than the pastures would have made them if no other stimulant had been applied. Ayrshires were rather more numerous, and were good.

In swine the only class to which prizes were awarded was the improved Berkshire breed; there being considerable opposition in this class, a very fine display was made.

Sheep.—The long drought affected the show in this class very much, the sheep being of a very inferior quality and very diminutive in size. They reminded me very much of sheep I had seen in some of the northern townships, where, after a few generations, their noses become pointed by continually picking the grass from between the stones.

The horticultural department was very good, considering the season. The fruit was also very good, although not in great abundance. The directors had it well protected by a wire screen, for fear the temptation might be too strong for the people in this part of the country, for they do not often feast their eyes on much fruit.

The fine arts and ladies' departments were very well filled, there being some very superior work exhibited, and showing much good taste on their behalf. A. J.

Light on the Oil Question.

To the Editor of the Farmers' Advocate.

Dear Sir,—Your columns being open to the Farmer and Mechanic, will you allow me to direct attention to a very great evil which affects our pockets seriously, and adds to the burden of the whole community of farmers and artizans. And while directing attention, put the question, Is it right that a few of the nabobs amongst the Oil Refiners of Canada should form themselves into a ring and so get the control of the oil refineries of Canada for the purpose of running up the price of oil, to the serious loss of all the consumers. Is it right?

2. Looking at the oil question rightly, when the best distilled oil can be bought from the oil refineries at Petrolia for 3½ cts. per gallon, and treated for 7 cts. per gallon, and barreled at 4 cts. per gallon, with duty of 5 cts. per gallon—or 13½ cts. per gallon—looking at these facts, there is no need of the public being called upon to pay 25 cents wholesale, and up to 50 cents retail, per gallon for the especial benefit of this ring.

Call attention to this sharp practice of these few (or the five) who hold the supply to-day, the present Government in its wisdom would do well to remove the duty of 10 cents per gallon on the importation of refined oil, which does not add to the revenue of the country, but only prohibits the importation of oil, which can be bought in New York for 12 cents per gallon. This course would interfere with the very questionable operations of this ring or any other oil ring hereafter; and the Government would be justified in taking off the duty. Why should they impose a duty amounting to over 75 per cent. to the benefit of these few, and to the detriment of the masses.

Yours truly,
REFINED DAYLIGHT PETROLEUM.

The yams have grown well this season with me considering the time that they were planted, and that was between the 15th and the 20th of May. I planted 160 tubers and cuttings and 157 came up after a long time, as the ground was not warm. I took up one that had grown seven inches long. I intend to leave this year's crop in the ground and take up what I left in the ground last year. I took a good many up last spring that weighed from one to four ounces and one to six ounces. I did not let any fresh manure come in contact with them at the time of planting. I find there is no trouble in raising them. They should be put out in the spring as soon as the frost is out of the ground and the ground is dry. You said in the September number of the ADVOCATE that the Chinese yam has not succeeded. Well, I don't wonder at it; you must have kept the tubers and cuttings in too warm a place; I know by what you sent me. They were dried up so that they were useless—that is, the cuttings. They should have been put in a dry cellar and covered over with earth. I took up some yams yesterday, one that had the cutting attached to it that I planted last spring, perfectly sound as it was the day I planted it, and one had a tuber attached to it perfectly sound. GEO. EMBURY.

We may possibly be yet in error in our opinion that Chinese Northern yam will not come into general cultivation in Canada. We shall be pleased to hear from others with whom they may have succeeded.—Ed.

THE CROPS AROUND OTTAWA.

Gloucester, 12th Oct., 1874.

SIR,—In your October number, on page 148, under the head of "Crop Report," your correspondent signing himself "D. L." has, in many respects, given a very untruthful report. He says in the first sentence: "The drought has been most injurious in this part of the country, much of the soil being light." Now, although the season has been a very dry one, it has not been so "injurious" to the field crops as your correspondent would lead one to believe; nor is it true that "much of the soil is light" about Ottawa, as any person knowing the country can testify.

He says that "wheat is not much more than half the crop it was last year." This, so far as fall wheat is concerned, may be true, as it was considerably winter killed, but the spring wheat is quite equal to last year's crop.

Some of the farmers here, and good ones too, do not bind their oats any season, and as for the "pulling of peas by hand," it is a perfect myth and not worthy of belief.

The potatoes are a fair crop, but not quite up to last year's yield, and "vegetables and roots" are not "a complete failure." It was remarked by a gentleman at our township show here on the 11th inst., that the vegetables were superior to what he saw at Toronto at the late Provincial Exhibition, some of the cabbages weighing forty pounds.

And the fruit that I have seen at the city of Ottawa, County of Russell and Township of Gloucester Shows would compare favorably in quality, if not in quantity, with anything I have seen at the western shows. The two concluding sentences are the only reliable ones in the whole communication.

Hoping you will give this a place in your next number, to counteract any unfavorable impression of our part of the country that "D. L.'s Crop Report" may have raised in the minds of your many readers,

I remain, yours respectfully,
J. J. SMYTH.

[We do not hold ourselves responsible for all communications, and are pleased to have correspondence that will tend to give correct ideas on any subject of interest.—Ed.]

WOOL CLIP.

SIR,—Below you will find a correct account of my wool clips for 1873 and 1874, and it is at your pleasure for inserting:

My clip of fleece wool in May, 1873, was 102 lbs. from 12 sheep, or an average of 8½ lbs. of saleable wool per sheep. My clip this present year, in May, was 144 lbs. of fleece wool from 16 sheep, and loose wool 12 lbs., making a total average of 9.34 lbs. per sheep of clean, washed wool. Breed of sheep chiefly Cotswold; some a sprinkling of Leicester blood.

I remain, yours, &c.,
RICHARD PIET.

Ashworth P. O.

Wild hogs are the most dangerous game in the Virginia mountains. They are found in herds of five to twelve, and the sight of a human being is the only signal for attack that they require. The intruder has then nothing left him but to outrun them or climb a tree and wait for them to leave.



AGRICULTURAL.

PRIZE FARMING IN IRELAND.

The offer of prizes of small pecuniary value for excellency in the management of farms, has been found to have a remarkably good effect in Ireland. Whether or not something of the same kind might have a similar result with us, were our agricultural societies to offer premiums for the best cultivated and improved farms within their jurisdiction, it is of course difficult to say. Doubtless, as a means of greatly benefiting agriculture proper, a portion of the funds of State or County Associations might well be diverted from the fostering of the fast horse interest, and appropriated to this purpose. But whatever might be the result, if it be attempted in this country, it will be instructive to note what has been done in this way to improve the condition of agriculture in Ireland. It is only since the year 1870 that the principles of agriculture have been taught in the public schools of Ireland, and school-farms or gardens have been cultivated in connection with these schools, as practical illustrations of the lessons taught. These have been very successful, and have greatly aided in improving the condition of the small Irish farmers, most of whom, or 317,457 out of 608,864 occupy farms of less annual rental than \$40.

As an additional encouragement to improved cultivation and homestead arrangements, the Irish Government has given, through the Commissioner of National Education, twenty-four prizes, three for each of eight districts, in which there are school-farms, of the value of \$17.50, \$12.50, and \$7.50 respectively, to be distributed annually for the next five years. The conditions are simply that the farms shall be of not more than \$40 annual rent, and that the successful competing farms shall be adjudged to excel in neatness and cleanliness of the house; in the amount and quality of the produce of the land; in the character and condition of the stock, which includes all live stock kept for profit, from horses down to bees; and in any other circumstances that may attract favorable notice. A successful competitor can take no more than three prizes in five years, and prizes are not given unless the farms are sufficiently meritorious and deserve them.

The examinations for the award for the present year have recently been made, and the judges' reports published. From them sufficient can be gathered to show that the expenditure has been productive of a vast public benefit. On all the farms which competed the improvements were very remarkable. The educational results were conspicuously shown by the greater money profit derived from the farms in consequence of their improved management: so that, should the prizes be withdrawn at once, the benefit would be a permanent one. The homesteads have been fenced in from the public road, and surrounded with gardens; gates have been hung; calves and pigs of improved blood have been raised; manure has been collected, and composting has increased its quantity and quality, and in the process cleanliness of yards and stables has been inaugurated.

In one case a woman, who farms 15 acres of land, has won a prize; she was the daughter of a farmer who had died, leaving a dependent family, and had been a pupil at one of the schools where agriculture is taught. Another successful competitor had never before had a field of clover or turnips, but now has adopted a rotation in which these ameliorating crops occur, and exhibited fields of each in excellent condition. His farm is said to be a model of clean cultivation and productive crops. He has made money by these improvements, and will never abandon them. Another competitor's farm, which last year was very foul with weeds, was found entirely free from them this year. The competition has brought many of these small farmers into popular distinction, and made them men of mark.—Some of the farms are visited by other farmers from far and near, much enthusiasm has been awakened, and the spirit of improvement is active and general.

While appreciating the difference that exists between farmers and farming in Ireland and in the United States, there is yet ample opportunity here for improvement, similar to that here related, which might be started by a similar agency.—American Agriculturist.

FIFTY BUSHELS OF WHEAT PER ACRE.

The average yield of wheat per acre varies largely in different States. In some States, according to the statistical reports, the average yield amounts to only nine bushels. In New Jersey it amounts to about thirteen. Of course such accounts of crops must be considered only as approximations to the actual product. If the average yield per acre is represented by thirteen bushels, there must be hundreds of acres which yield only four, five and six bushels, as it is known from actual weight of the grain that a great many farmers raise from twenty-five, and even thirty bushels of beautiful grain per acre.

Such approximate accounts of the wheat crop reveal certain impressive facts concerning the cultivation of this valuable cereal, which should arouse tillers of the soil to a careful consideration of the immense loss sustained, both by the proprietors of the land and the government in consequence of such meagre crops. Bountiful harvests not only render tillers of the soil more independent, pecuniarily, but they tend to augment the revenue of the government. It is an impoverishing policy, in more than one respect, for a farmer to pursue that system of management which will return him only six, nine or twelve bushels of wheat per acre; as the expense of ploughing, harrowing the ground, putting in the seed and cutting the corn with the reaper will be about as great when the yield is only eight bushels per acre as when the product is forty, or even fifty bushels. Land in a poor state of fertility will require about two bushels of seed wheat per acre. The product may be eight or ten bushels. It will not pay to attempt to raise wheat at such a costly rate. The productive capacity of a large portion of the tillable soil of America can safely be computed at forty and even fifty bushels of clean and bright grain per acre, provided the land is tilled as it should be, and as it will pay to cultivate it.

It was a common occurrence, when the pioneers of our country first removed the forests, to hear of forty, fifth, and even sixty bushels of beautiful wheat per acre. Even at the present period numerous accounts are rendered every season of the actual yields of large fields in which the product is represented by forty, some fifty, some sixty, and a few more than sixty bushels. Here, then, is an impressive fact, which furnishes an instructive commentary on the cultivation of wheat. The pioneer farmer of Western New York was wont to cut down all the timber on a given area of ground, let the trees, brush and all remain for a few weeks until the weather was hot and dry, when the ground would be cleared by a huge bonfire, the surface thoroughly harrowed (not ploughed), and one and a half bushels of wheat put in. An ordinary yield would be thirty bushels of clean and plump grain. A fair crop would be spoken of as forty bushels, and a first-rate harvest as fifty bushels without a weed or thistle or panicle or chaff among the growing grain. If an acre of fair wheat-land now covered with heavy timber be cleared in the same manner, and seed wheat be put in about the first of September (from the first to the tenth at the North), the proprietor can rely on a yield of forty bushels of choice grain with almost absolute certainty, provided he sows choice seed.

This fact furnishes a correct idea of the natural wheat-producing capacity of the soil. But most Americans are so grasping that the most fertile ground that can be found is soon badly impoverished by injudicious management. When a forest is cleared, every tree and stick of firewood is removed without returning one atom of fertilizing material to aid in maintaining the original fertility of the ground. It is a difficult and tedious process to renovate a field that has been completely impoverished by judicious management. But if the precaution were observed to maintain the fertility of rich ground by returning a fair equivalent in the form of some kind of fertilizing material every time a crop is removed, there would be no difficulty in raising from thirty to fifty bushels of superb wheat from every acre that is adapted to the production of this sort of grain.—N. Y. Observer.

Nov., 1874.

Garden, Orchard and Forest.

THE PEAR SLUG.

This disgusting insect has been quite numerous in some localities during the summer, and has in some instances caused considerable damage to the pear trees. They are first noticed after they have eaten several days, and the trees begin to put on a rusty appearance. The perfect insect of this slug is of a glossy black color, about a quarter of an inch in length, and might be mistaken by a careless observer for a common fly. They come forth from their winter quarters in May or June, and lay their eggs and disappear in the course of three weeks. We quote Harris' description of these slugs:—

"At first the slugs are white, but a slimy matter soon oozes out of their skin and covers their backs with an olive-colored sticky coat. They have twenty very short legs, or a pair under each segment of the body except the fourth and the last. The largest slugs are about nine-twentieths of an inch in length when fully grown. The head, of a dark chestnut color, is small, and is entirely concealed under the fore part of the body. They are largest before, and taper behind, and in form somewhat resembles minute tadpoles. They have the faculty of swelling out the fore part of the body, and generally rest with the tail a little turned up. These disgusting slugs live mostly on the upper side of the leaves of the pear and cherry trees, and eat away the substance thereof, leaving only the veins and the skin beneath untouched. Sometimes twenty or thirty of them may be seen on a single leaf; and in the year 1797 they were so abundant in some parts of Massachusetts, that small trees were covered with them, and the foliage entirely destroyed; and even the air by passing through the trees became charged with a very disagreeable and sickening odor, given out by these slimy creatures. The trees attacked by them are forced to throw out new leaves, during the heat of the summer, at the ends of the twigs and branches that still remain alive; and this unseasonable foliage, which should not have appeared till the next spring, exhausts the vigor of the trees, and cuts off the prospect of fruit.

The slug-worms come to their growth in twenty-six days, during which period they cast their skins five times. Frequently, as soon as the skin is shed, they are seen feeding upon it; but they never touch the last coat, which remains stretched out upon the leaf.

After this is cast off they no longer retain their slimy appearance and olive color, but have a clean yellow skin, entirely free from viscosity. They change also in form, and become proportionally longer; and their heads and the marks between the rings are plainly to be seen. In a few hours after this change they leave the trees, and, having crept or fallen to the ground, they burrow to the depth of from one inch to three or four inches, according to the nature of the soil. By moving their bodies the earth around them becomes pressed equally on their sides, and an oblong oval cavity is thus formed, and is afterwards lined with a sticky and glossy substance, to which the grain of earth closely adheres. Within the little earth cells or cocoons the change to chrysalids takes place; and, in sixteen days after the descent of the slug-worms, they finish their transformations, break open their cells, and crawl to the surface of the ground, where they appear in fly form. These flies usually come forth between the middle of July and the first of August, and lay their eggs for a second brood of slug-worms. The latter come to their growth and go into the ground in September or October, and remain there till the following spring, when they are changed to flies and leave their winter quarters.

It seems that all of them, however, do not finish their transformations at this time; some are found to remain unchanged in the ground until the following year, so that if all the slugs of the last hatch in any one year should happen to be destroyed, enough from a former brood would still remain in the earth to continue the species."

Whale oil and soap-suds applied with a garden syringe will destroy this, as well as most other insects which infest the garden or orchard, but lime, ashes, or even any kind of fine dry dust sprinkled on the insects freely, will destroy nearly all that are touched.

They cannot live long unless covered with their peculiar slime, and any dust which absorbs the moisture and dries them up is pretty sure death to them.

ORCHARDS—CULTIVATED OR IN GRASS.

This question has been the subject of a good deal of honest controversy through the agricultural papers within the past year or two, some contending that all fruit trees, to be healthy and productive, must have the ground under and about them constantly cultivated, while others are equally sure that a surface covered by grass is decidedly better for the health and productive capacity of the trees. We are inclined to take the middle ground, and allow that each method is the better under certain circumstances. Much depends upon the character of the soil on which the trees grow. We can point to certain orchards which have been in grass ever since the first year or two after the trees were planted. They are both thrifty and productive, and the owners claim that if they were to cultivate the land constantly, the trees would grow vigorously, but produce little or no fruit.

The land is peculiarly adapted to fruit trees, and little care is required, except to keep injurious insects from the trees, and harvest and market the fruit. Such cases are comparatively rare, however, especially in New England where the land generally needs considerable forcing to make it produce thrifty, healthy trees, capable of bearing full crops of large, handsome fruit.

We would treat the orchards according to their needs. If they need checking we would check them, and if, as is usually the case, they need urging and forcing, we would do that by applying fertilizers in abundance, and by keeping the soil mellow and free from other crops which might injure the growth and bearing habits of the trees.

Mr. Thomas Mechan, of the *Gardener's Monthly*, has been a strong advocate of the plan of keeping orchards in grass, and is opposed to the common theory that trees, to do well must be cultivated like corn or other doed crops. The following extract from an article of his will indicate on what ground he bases his peculiar theory. Our readers can judge whether their own soil most needs shade or culture:—

"One of the old and long cherished theories of fruit culturists is that trees will not do well without a constantly clean surface. It is conceded that trees will not thrive when the temperature of the earth is much above seventy degrees. At eight degrees the system of the tree becomes weak, and renders the leaves susceptible to the attacks of various fungi and other diseases. And yet the experimenter will find in this region, at least, that soil unprotected on the surface of the sun's rays will go over ninety or one hundred degrees. It is very likely after this he will get tired of seeing the leaves of his pear trees fall off before midsummer has hardly gone, and go to protecting the surface in the same way, yet believing, probably, that in "theory," at least, the exposed, clean, sun-roasted surface is the proper way, and the only right way, to grow fruit trees.

He may live in a region where, year after year, seedling pears drop their leaves so early in the season that it is impossible to bud them; and he may have to abandon the business to Northern men who can "young seedlings and pack them thoroughly through and about with brushwood, so that it is almost a struggle for the plant to push its way most a healthy to the leaves young and through. He will find the leaves young and healthy to the last, while those in the clear, clean soil will long have lost theirs; and on testing land under the crust with a thermometer, will find it about twenty degrees lower than in the other case. He may think after this that it will pay to keep his soil cold in some way, though he still may not hold that a clear, clean surface is the beginning and end of all good culture.

This is the season of the year to think of these things. Let every one take his thermometer and try the difference between the shaded ground and the cleared ground, and the difference in health of the trees in connection with the earth's temperature, and he will be surprised how much he will learn. He may, perhaps, be laughed at as a "scientist" by some good, easy-going folks, but he can lay the whole blame of it, if only on the *Gardener's Monthly*, who will cheerfully bear the ridicule for its dear readers' sake."

BLACKBERRIES.

A. M. Parly, Palmyra, recently showed us a plantation of an acre or two of the New Rochelle blackberry, densely loaded with berries and promising a very heavy crop. The bushes had stood seven years upon the ground, and the only cultivation to which they are subjected is a shallow ploughing between the rows early in spring, and mowing the grass in which they are enveloped. They are pinched back so as not to grow more than about three feet high. This treatment keeps them partly in a dwarf condition, and insures productiveness. If cultivated more the growth would become too rank on this rich soil, and they would bear less, become more straggling, and be more liable to winter killing. This is now well understood by blackberry planters, and is in accordance with the remark which we have from boys who gather will blackberries, "that if they find a bush which the cows have browsed, it is always sure to be full of berries." Mr. P. says that with this treatment the New Rochelle proves more productive on his grounds than the Kittatinny, and that the winter killing, from which the former suffers, does not prove a serious difficulty on his grounds, and his remedy, which is to remove the affected plants on its first appearance, proves effectual.—*Exchange.*

TRANSPLANTING.

Always see that the soil is thoroughly moist in the pots, if not it is difficult to turn the plants out without breaking the roots, and the old ball of soil will remain dry after frequent waterings. Make the soil thoroughly firm around the roots for them to strike at once into the fresh soil; if necessary to water the plants after planting, do it with a spout, not wetting the soil all over the ground; this only cools the soil without giving the plants any benefit, and the soil is seldom dry far below the surface at this season.

If the beds were well turned up in the fall, which should always be done, at the same time adding any fresh soil or manure required, nothing more will be required but stirring up with a fork, which should be done in a few days before planting, to allow the sun to warm the soil. We shall infer that it has been previously decided how the most prominent beds are to be planted, and the requisite number of plants prepared for each, so we have nothing to do but bring the plants out and plant them at once, for the less time pot plants are standing about before planting the better, as in a very short time they get dust dry and the roots suffer. We mention this from noticing very enthusiastic amateurs taking out a quantity of plants in the morning and leaving a number unplanted until perhaps the next day, and then planting when the pots were dust dry.—*Horticulturist.*

OLD STRAWBERRY PLANTATIONS.

If they have borne two full crops, plough them under. We do not believe that it will pay to raise over two crops of strawberries from one planting, and many of our best small fruit growers only take one full crop, knowing that they will diminish in size and yield thereafter; but if well matured when planted, and kept clean at all times, the second one may pay.

Let us examine the plants in a strawberry plantation at this season of the year, when a large crop of strawberries has just been gathered. If the plants have been kept in stools—the runners all removed—those stems which have borne fruit are exhausted, and die, and so do the roots employed in feeding them; and from near the crowns of those roots new roots have started, which either have thrown or will soon throw up new stems to form the basis of next year's crop.

Some practice cutting off and removing the old stems and leaves, just as we do the old exhausted raspberry canes after they are through bearing, and believe that the new ones start up fresher, and grow more rapidly in consequence, and we have certainly seen good results from such a course, but whether we cut off the vines or not, the ground between the rows which has been compacted by many feet, should be broken up mellow to the depth of three to five inches, and all weeds and grass cleaned out.

If the ground is not very hard, perhaps one of the improved cultivators or grubbers would be the best implement for mellowing

it, but if it is packed too hard to yield readily to these, a one horse plough (steel is the best) should be used, ploughing the earth from the rows. After the plants have been cleaned out, the ridge thrown up between the rows should be leveled with the cultivator.

If the strawberries have been kept in narrow matted rows, the spaces between them should be broken up, and the rows themselves cut down quite narrow, and cleaned out. Sometimes the workmen may run the plough just under the original plants, and leave a row of fresher ones on one side of the old one. Where this can be done, it will give you a more vigorous plantation for next year's crop.

After the plantation has been put in good order, you would have a stronger assurance of a good paying crop next year, if you should apply a top-dressing of fine, concentrated manure.

A good article of superphosphate, or bone dust, could be easily scattered along the row, and would probably repay cost several times over in the next crop of berries.

The directions here given for the management of market plantations will apply equally well to the family garden patch, only substituting the spade for the plough in breaking up the ground.

If the reader comes to the conclusion that a good deal of labor is involved in the proper cultivation of the strawberry, it will be a correct conclusion, but then none but the best cultivation pays. Our best cultivators make some money in growing strawberries for market, but half cultivators make none.—*Am. Rural Home.*

TO PRESERVE GREEN GRAPES.

MESSERS. EDITORS:—A very simple and successful method of preserving the green grapes of wild vines, is one employed in this State, which may be interesting to some of your readers. The grapes must not be too old; the best time is just before the seed begins to harden. They are, after being picked and freed from stems, put into bottles (strong wine or champagne bottles are best) so as nearly to fill the latter. These are then filled with fresh and clean water. After this they are all placed in a large kettle, partially filled with cold water, and the temperature raised nearly to the boiling point. The water in the bottles expands by the heat, and part is driven out. As soon as sufficiently heated, they are taken off, enough water poured out of each bottle to merely allow a well-fitting cork to be pressed in tightly. After being corked they are sealed up with sealing wax or common beeswax. As the bottles cool down a partial vacuum is left in the neck of each.

Grapes thus preserved have kept for years in this climate, while canned fruit almost invariably spoils during the hot summers. They can at any time be opened and prepared like fresh grapes, and no difference will be found in the taste. It is better to use the water, also, in which they were kept, as it contains a large percentage of tartaric acid, which gives them the pleasant sour taste. I hope some will try this method and profit by it. A. F. Indianola, Texas.

WHAT IS THE BEST MANURE FOR APPLE TREES.

E. W. Paine, Shelter Island, N. Y., writes as follows:

"I saw by the *New York Times* that the question was asked—'What is the best manure for apple trees?' I have tried several kinds, and find that by taking off the soil around the trunk, say two or three feet down, or nearly to the roots, and putting on any bones which go from the kitchen, which I save for that purpose, covering and letting them decay, that this feeds the trees sufficiently. I tried the experiment on some, and found that they grew four times as fast as the others, and yielded abundantly. One of my neighbors dug a trench around some of his trees that had never bore anything, and put into it two inches of bone dust. The same trees have borne ten bushels a tree ever since. I have, by grafting in the ground, got fruit in three years, which has been my common practice. I take sweet sugar apples and graft on a sour stock, and get beautiful and sweet-tasting apples. I have some that are as white as this paper, grow large and keep well—better than any I have ever seen."

1874

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SAS.

write up Kan- World, to few the *Ploughman*, reluctance that the other side nger visited our April and May, extacies about the land; all nat- green, every ed seemed ambi- hopes of the es in the shade. thing vegetable promising condi- ges begin to thin the rain ceased "Old Sol" began of earth. The clouds, but all in

weeks no rain to ; the millions of ed stalked up to ed and was fairly d wind. Next countless billions. the corn but the stalks. The dis- a right to expect bushels, will not must be killed or not afford to feed potatoes, nothing to pay our taxes, and only corn to depend aid. Dejection is here last week was many will emigrate many are too poor m hog and hominy og crop will fall off want of the means hogs. I advise all s to go while they e will be extremely cannot buy what session in all kinds of or the corn and hog e great export of the ll the wheat to keep g, until another crop certainly a hard time l support the thour- ough the coming fall nowns.—*Plowman.*

A MYSTERIOUS BLIGHT.

We invite the attention of cultivators of fruit to the following letter of Mr. Lorenzo Rowse, of Clinton, N. Y., just published in the *Utica Herald*. Disease like this cannot be too early or too closely observed and studied:—

This singular blight was first noticed by me, in the latter part of June, 1872, on an apple tree, standing in an isolated, but somewhat conspicuous position in my grounds, where the blight would be quite likely to attract my attention at the outset, as I was accustomed to pass near the tree several times every day. Subsequently I found that others of my trees were similarly affected, but not to any serious extent, while the young growth of the tree first noticed was suffering in an alarming degree. Feeling somewhat anxious about the tree, which was young and hitherto very thrifty, I called the attention of many persons to it, but found no one who could give any explanation, or even a satisfactory conjecture. None had noticed any similar case elsewhere. But on careful investigation I found no difficulty in discovering similar cases elsewhere, and many of them. I also found that not only the apple tree, but its congeners, the pear and the quince, were similarly affected. Some attribute it to an insect; but careful microscopic examinations, in hundreds of different cases, failed to detect any evidence of insect work. A scientific friend suggested, at that time, the possibility of its having been caused by electricity, but as there had been no unusual electric phenomena of recent occurrence, at the time of the appearance of the blight, that theory was then as unsatisfactory to myself as it is at present. Hoping to elicit some information on a subject so interesting to myself, I called the attention of the members of the Central New York Farmers' Club to it, in the latter part of the season, and exhibited several samples of the diseased branches. But the matter was confessedly new to nearly all of those present, and, as Mr. Shull correctly states, "no definite conclusion as to the cause was arrived at."

But very slight indications of the blight were detected by me in the summer of 1873, and the trees previously affected seemed to have fully regained their former sound and healthy condition. But the present season brings the disease upon our trees in sufficient force to attract the attention of the most casual observer. That it is precisely identical with that which appeared two years since, I find abundant evidence. It receives more attention now, not because of any difference in the symptoms or character of the disease, but because the indications are more noticeable, and the disease far more widely extended, few localities in Central New York which I have had opportunity to notice, being entirely exempt from it.

I have found that the difficulty invariably originates in the new wood, the growth of the current year. Usually it commences at the base of that new growth; that is, at the joint, line or bulge which marks the division between the growth of the preceding and the current year, in the slender branches, which are the first to be affected. The new growth begins to wither and die, as is shown by the wilting of the leaves. If the withered branch is allowed to remain, the disease frequently extends backward or downward, killing at least a portion of the growth of the previous year, and frequently the whole of it, and sometimes even more. I have found that, by clipping off the diseased portion of the branch as soon as it is affected (the indications of which I have just stated) this downward progress of the disease may be essentially checked, and, in most cases, entirely prevented. I would, therefore, strongly recommend the course.

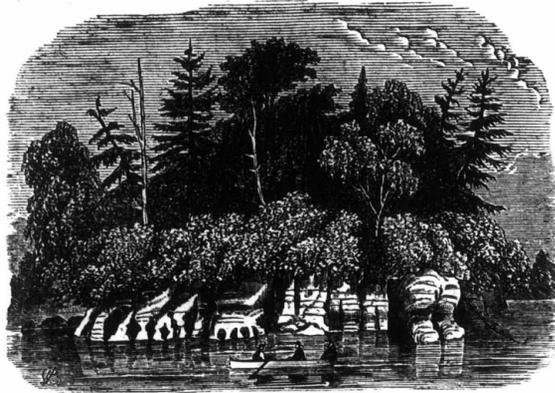
Now, as to the disease itself. What is it? It is, perhaps, much easier to determine what it is not, than what it really is. As already stated, repeated examinations carefully made have failed to furnish any evidence that it is the work of an insect. The theory of Mr. Shull and some others that it is to be attributed to the effects of electricity, is, as I have already said, entirely unsatisfactory to myself, inasmuch as it is wholly deficient in the proofs necessary to sustain it. It is merely conjectural, and, therefore, an unsafe method of solving the mystery. In fact, a moment's reflection must satisfy us that the theory is antagonistic to all former experience. I have been an attentive observer and cultivator of fruit trees for nearly half a century, and have

carefully studied their habits and their wants, their disease and the remedies. The blight which is now upon them was entirely unknown to me until 1872, and all agree in pronouncing it something new. Now how is this, if the electric theory be correct? Have our trees changed their natures, and suddenly become so unprecedentedly susceptible to the influences of electricity? Or is the electric fluid so essentially different from that of former times? I find no evidence of it. The bolt which struck within a few rods of my dwelling, about the time designated by Mr. Shull (the 7th of June,) was, as near as I can judge, very similar to the one by which I was suddenly prostrated and nearly killed more than fifty years ago.

Views on the Hudson River.

A short distance below the confluence of the Hudson River and Fishing Brook, you enter Rich's Lake—an irregular sheet of water, about 2½ miles in length, with picturesque surroundings. Near the foot of the lake is a wooded peninsula, whose low isthmus, being covered at high water, leaves it an island. It is called Elephant Island, because of the singular resemblance of some of the limestone formation that comprises its bold shore to portions of that animal. The whole rock is perforated into singularly formed caves.

Sunnyside was the residence of Washington Irving, one of the greatest of American



ELEPHANT ISLAND.



THE POND AT SUNNYSIDE.

The disease now appearing on our apple and other trees may, I think, properly be termed a blight. The cause, and how to prevent it, is yet to be discovered. I have suggested a partial remedy. The blight is distinct from, and should not be confounded with, what has been heretofore known as the "pear blight," nor with the "frozen sap blight." It is entirely distinct, also, in every respect, from the fungus growth on cherry and plum trees, known as the "black knot." What we need is facts in relation to it. Theory alone, unsupported by facts, is insufficient.

It is situated on the Hudson River, the beautiful curves and banks of which could be seen from its windows. Irving was a great lover of natural scenery, and spent much time and money in beautifying his place. The pond illustrated above is just a hollow in the hills filled with water. It is made by damming the stream, and it has a pretty cascade at its outlet. We will, in our next number, give some more views of the charming scenery along the Hudson River.

New winter gardens and the aquarium, provided at a cost of nearly £100,000, have been opened at Southport, England.

HOW TO TREAT FRUIT TREES.

In considering the growth of organisms, the action of the Alkalies is to be looked upon as scarcely less important than that of air and water. Lime is the great animal alkali, and potash the vegetable one; its old name of vegetable kali expressed that fact, and all the potash of commerce is well known to be derived from wood ashes. The importance of potash as a manure has been frequently overlooked by farmers, who rarely know the large amount of this material found in grass, grain crops, leaves, barn yard manure, roots and fruits. How potash acts in plants, in conjunction with carbon and silex, to form woody fibre, starch, sugar and oil, is yet unknown to chemical observers, but the fact of its action is beyond a doubt. Liebig long since pointed out that the chief cause of barrenness is the waste of potash carried off by rich crops, especially tobacco, with no replacement but by proper manure. How many millions of pounds of potash have been sent to Europe from the forests of America, and in the grain, tobacco and hemp. Luckily one alkali may be replaced by another, and we have received a considerable quantity of soda from European sea-weed and in the shape of salt. Latterly, nitrate of soda from natural deposits in South America is brought to us at a cheap price.

The point to which we now call attention is that our farmers and fruit growers have ignored, or rather been ignorant of, the importance of wood ashes as a vegetable stimulant, and as the leading constituent of plants. Even coal ashes, now thrown away as useless, have been shown, both by experiment and analysis, to possess a fair share of alkaline value. According to our observation, if the practice of putting a mixture of wood and coal ashes around the stems of fruit trees and vines, particularly early in the Spring, were followed as a general rule, our crops of apples, grapes, peaches, &c., would be greatly benefited both in quality and quantity, and the trees and vines would last longer. We will relate only one experiment. Some twenty-five years ago, we treated an old hollow pippin apple tree as follows: The hollow, to the height of eight feet, was filled and rammed with a compost of wood ashes, garden mold, and a little water lime (carbonate.) This filling was securely fastened in by boards. The next year the crop of sound fruit was sixteen bushels from an old shell of a tree that had borne nothing of any account for some time. But the strangest part was what followed. For seventeen years after the filling, that old pippin tree continued to flourish and bear well.

Let us call attention to still another point of importance in fruit-raising. This is the bearing year for apples and fruit in general in New England; probably it is also in some other parts. Now, when such years come, the farmers rejoice too much at their prosperity and abuse it, as nearly all people do the gifts of fortune. We should be temperate as to the quantity of our fruit as well as of our fruit juices. By proper trimming and plucking, the apple crop in bearing years may be reduced to but little more than half a crop as to number, but the improvement in size and price, and in the future effect, will more than balance the loss. Next February, March, or April, according to latitude, let the tree-trimmer stimulate and nourish his trees and vines with a fair supply of ashes, and in nearly every case he will have a good crop of fruit in the non-bearing year.—*Scientific American.*

THE SILVER MAPLE.

Did any of our readers ever hear that the shade of one tree was cooler than the other? We have, and have laughed at the notion, but intend to be more respectful in future. Here, as we sit at eventide after our hard day's work is done, watching the deepening crimson in the clouds, as in the far West the sun goes down; and the cool breeze, sweetened by clover blossoms, comes sweeping up under the maple trees before the cottage door; sure well are we that there is no tree which in such sultry times as these, would secure us an air like this.

And yet the Maple—the Silver Maple—is but a common tree. "Only a few Maples," is the apology of the improver when he begins to talk of more trees to plant. He has these, but he is ashamed of them. There is about them none of the blooming beauty of the Horse Chestnut; and in simple majesty the Linden or scores of other trees would put them all to shame. Even among its own kindred it stands out sort of Cinderella despised by its

own sisters at The Norway on their dense species,—and of the Sugar fall tie of the The Silver Its early spring-bud scale in autumn n gay color fo bides its tim tiously to re It grows with the hands of grow anywh poor, the un add with a keeper says fies competi We cannot like these the gardeni and flowers their wise s days, with burning up less of gardi comforts for mind. It r that the Si grower to b ly built up room for it branches, t m re accep We shou gar mers pa of summer not so mu coolness th plantation arranged as The mental and yet the sultriness this kind d will be tim them to eec desirable ch in.—Garden

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TREES.

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own sisters and with none to say for it a word. The Norway and Sycamore pride themselves on their dense dark heads,—the spring pays homage to the youthful beauty of the Red species,—and the lovely yellow and scarlet of the Sugar cause boundless admiration in the fall time of the year.

The Silver Maple has none of these things. Its early spring flowers are no more than bursting-bud scales. There is no particular beauty in leaves or branches; and when every thing in autumn more or less clothes itself in some gay color for the harvest festival, it simply bides its time, and sends its leaves unpretentiously to rest. But it has its sterling virtues. It grows with great rapidity; asks no favor at the hands of skillful gardeners; but is ready to grow anywhere at the wish of the rich or the poor, the unlearned or the learned, and we will add with a grateful shade, which, as the store keeper says of his substantial goods, defies competition.

We cannot afford to do without trees like these. We like the mental part of the gardening. We love to hear trees and flowers talk, and to ponder over their wise sayings; but here in the dog days, with every thing parched and burning up about us, we think none the less of gardening that it brings to us comforts for the body as well as for the mind. It must be confessed, however, that the Silver Maple is too large a grower to be a good street tree in closely built up districts; but when there is room for it to spread its rapid growing branches, there is none that will prove more acceptable on the whole.

We should like to see our landscape gardeners pay more attention to this idea of summer shade than they do. It is not so much shade, as to the breezy coolness that is desirable. Many a plantation of trees and shrubs are so arranged as to look remarkably well.—The mental effort is a complete success; and yet the "air" is shut out and close sultriness prevails. A few hints of this kind at this season of the year, will be timely, as people can look about them to see where improvements of this desirable character can well be brought in.—Gardener's Monthly.

GRAPE CULTURE.

The cultivation of the vine in this Province has, during the past few years, reached a magnitude which very few would have conceived it capable of reaching in this latitude a decade ago. In 1871, the Hon. D. Reesor, having become practically as well as theoretically conversant with the cultivation of the grape vine, partly as an experiment, although fully satisfied of its ultimate profitability, planted nearly seven acres of vines, embracing thirteen different varieties. Among the finest in his vineyard, as a dessert grape, is the Delaware, which when ripe is of a claret color and very delicious. There are other varieties of a sub-acid flavor, which are preferred by some. Almost since the cultivation of the vine was in its infancy, which we presume cannot be traced farther back than the creation, even though Darwinian disciples might claim its pre-Adamite existence, grapes have been held in high esteem for their medicinal properties. Italy and other countries in southern Europe, where the vineyards are of unlimited extent, and where great quantities of wine are manufactured, have fewer inebriates in proportion to their population than Great Britain, America and other countries where malt liquors and the extract of corn is principally drunk. Temperance people, instead of looking on the growth of the grape and the wine press with disfavor, might justly consider one of the channels through

which the millenium of their cause would be hastened. The grape unpressed is undoubtedly an excellent tonic, and by its continued use is said to greatly benefit invalids. In a letter received by the gardener to Her Majesty the Queen at the Royal Gardens, Frogmore, from the late Sir Robert Peel's gardener, near Geneva, he refers to three very large old vines in his neighborhood, and to the treatment of invalids to what is generally known there as the "Grape cure." He writes as follows:—"I have ascertained from family documents that they were fine large vines a hundred years ago. The diameters of their stems near the ground is an average of 1 foot 6 inches, equal to a girth of 4 feet 6 inches. The finest of them grows on the slope of Mount Salne; the other two

on the flat plain that at one time probably formed part of the Lake of Geneva; the soil they are growing in is pan chalk, which when dug up in autumn, looks more like a turnpike road than a vine-border; yet these vines are in great vigor, and last autumn, owing to the hot summer, yielded more wine, and of higher quality, than usual. The Lake of Geneva is forty miles long; on both sides it is planted with vines; and during the autumn, hundreds of invalids come from all parts of the world to undergo what is termed the 'Grape cure' here. They begin by eating half a pound of grapes a-day, and increase the quantity till it reaches thirteen pounds, when they gradually diminish it. By this means, I have known many remarkable cures effected, even of cancer and

ties show by survey but 1,279 acres of scattering timber, while the total area of these counties is 1,198,280 acres. A bill was introduced in the State Legislature of Minnesota appropriating \$5,000 to aid in planting trees along the public highways, and it only failed of passage in consequence of the absence of some members.

Mr. Hodges' pamphlet gives information in detail respecting the planting soil, and choice of trees, and his estimate of expense is wonderfully cheap. For instance, to plant cuttings for one mile of road, each one foot apart, or 5,280 in all, the cost is but \$15.85. One man can easily stretch the rope and rake the ground, while a lively lad of 15 or 20 can stick them; or in other words, two good hands can plant a mile a

select 240 acres of land in the vicinity of a railroad, enter 80 acres of it under the Homestead Act, 160 acres under the trees planting law, for which he has to pay only the small fee of \$42. He must build his house on the 80 acres, live there, and cultivate the land. He must also at once break 40 acres of his timbered claim, which must be planted with trees within the first 5 years after filling. The remaining 120 acres may be used as farm land. At the expiration of 10 years his 40 acres of timber alone will be worth not less than \$6,000. In addition to these Government encouragements, in tree-planting, the State of Minnesota has enacted a law agreeing to pay during a term of ten years \$2 each year for every acre planted with trees, this payment to commence the third year after the plantation is made—thus paying for forty acres \$80 each year, or for ten years \$800. For planting trees along public roads and highways the State also pays \$2 for every half mile, the trees not to be planted more than one rod apart; and if trees are planted on both sides of such roads or highways twice the amount, or \$4 for every half mile, provided the trees are well taken care of and kept in a healthy growing condition. These terms are such a decided encouragement to tree culture that we judge there will be a furor among the Western prairie farmers to agitate the subject and practice it with haste.—N. Y. Independent.

The Fox.

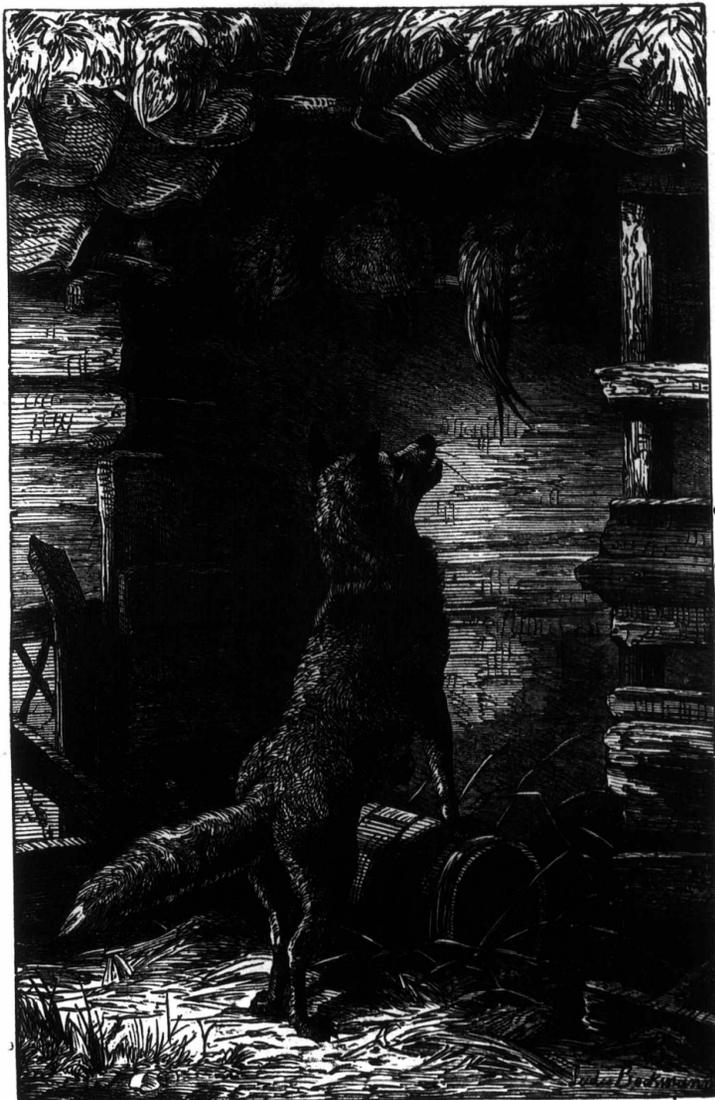
Last month we gave a picture of Mr. Fox in his native wild. This month we show his entrance into civilized society, with its benefits and disadvantages to himself. No doubt if he succeeds in grabbing that fine fat chicken which he has his eyes on, he will have a jolly meal, and will feel that civilization is his proper element; but in the morning, when he hears the hounds giving tongue (see cut on page 170), and knows that his last night's meal was too good for him to be able to run well this morning, he will wish his hole and home in the woods was closer, and that he had been satisfied with less dainty delicacies, in some place where dogs were not so plentiful and men so fond of sport.

WHY PEARS CRACK.

Concerning this important subject, Thomas Mehan, editor of the *Gardener's Monthly*, writes:—"Pears do not crack when the soil is sufficiently supplied with lime and potash; and they crack most where those salts are deficient. Common wood ashes contain these salts, nearly in the quantity and proportions that pear trees on such soil require—forty per cent. of potash and thirty per cent. of lime. Reasoning from these facts, I applied wood ashes at the rate of four hundred bushels to the acre, after the fruit had formed and cracked. Many of them headed up a d made perfect fruit the same season; others not until the next season. A friend, at my suggestion, applied it heavily to a favorite butter-pear tree in his own garden for several years in succession, and has had for several years a perfect and delicious pear, and I will guarantee it to cure any case where the ashes are fairly and abundantly applied.—I was told by an experienced hand that I would kill the tree, but on the contrary, I cured them.—Therefore, do not be afraid; if one application will not suffice, give them a larger dose next year. A moist atmosphere undoubtedly encourages the growth of the tree and fruit, while the insufficiency of proper food prevents the perfection of either; hence cracked fruit and 'rough old bark.'"

FLORAL DESIGNS.

Where tulips, hyacinths or crocuses are planted in quantity it is a good plan to give some regard for color in their arrangement. A small round bed of crocus, for instance, might have the purple variety in the centre, the yellow round that; next place the striped kind, and, finally, the white; or this order may be reversed with equally good effect. The same arrangement might be observed in border planting by having the colors in separate rows. A very pleasing effect is produced by staking out four rows. Commence the first row by planting about two feet of white crocus, followed with two feet of purple, then



consumption, which have baffled the best medical skill."

FOREST TREE PLANTING IN MINNESOTA.

The subject of tree planting in Minnesota has assumed an active interest, and we have before us a publication on this point, written by Leonard B. Hodges, superintendent of tree planting of St. Paul and Pacific Railroad Company. A large portion of the western part of the State is entirely deficient in timber; in fact, there is one almost unbounded and unbroken tract, west of the Big Woods, containing an area of over 12,000,000 of acres of soil extremely fertile, so entirely destitute of timber that it does not average one-tenth of an acre of timber to 100 acres of prairie. Three first-class coun-

day, if the ground is properly prepared for them. He estimates that in five years' time these cuttings will have grown from twenty-five to thirty-five feet high and from three to seven inches at the butt. If planted in the form say of a square of ten acres, some eight feet apart, five years, time would be sufficient to furnish all the fuel and fencing necessary to support a large farm, and afford additional income from sales of fence-poles.

The varieties of timber most recommended are the White Willow, Cottonwood, Lombardy Poplar, Box Elder. Others are not so sure of success, although in our State they do well—White Ash, Black Ash, Ash-leaved Maple, Soft Maple, Elm.

By the new terms of the U. S. tree planting and the homestead law, any citizen can

two feet more of yellow, and finally two feet of the striped variety; now, plant the second row, beginning with purple, then yellow, striped and white; the third commencing with yellow, and the fourth with striped crocus.—Such a bed is very handsome, indeed. Of course, other devices may be followed, such as stars, crowns, and the like, not only with crocus, but also with tulips and hyacinths.

THE BASKET WORM OF EVERGREENS.

If an elm, a maple, or most deciduous trees lose their spring leaves they will push out more before the fall, and though the tree so losing its early foliage is somewhat injured by it, the injury is not so serious as to threaten the life of the tree. In China the leaves of the tea plant are taken off three times during the growing season, and still the plant lives for many years.

Evergreen trees are not, however, so tractable. If they once lose their leaves they are done for. We have known caterpillars to eat the foliage from the Scotch pine, and the death of the tree resulted.

We have on several occasions called attention to the injury done to the arbor-vitae and some other evergreens by the ravages of the basket worm. This may be remedied by a few minutes employed in picking in the summer time. The small caterpillar commences to weave its basket at that time, increasing the size with its own growth, and feeding on the young green leaves at the same time. When about the size of peas they are readily discerned, and quite large trees may be gone over and the little pests cleared off for burning in a few moments. Evergreens attacked by them and given up to their ravages for a single season, seldom recover, and it is therefore far more important to pick them off from these than from deciduous trees.—*Germantown Telegraph.*

erican cheese, I believe, commands as high a price as the best Cheshire. It will in time be so with American pork, bacon, hams and lard.

As a rule, the price of agricultural products in Europe determines the price in America. Hitherto the cost of labor here has been double and treble what it was in Europe. Our products had to compete with the products of this cheap labor, and pay freights over long distances into the bargain. We have been able to compete because we lived economically and worked hard, and because our land was cheap and comparatively rich in what I have called "natural manure." We have grown cheap wheat and corn on our new land, because we have to pay no rent, and because every bushel of wheat we have grown has found an amount of manure in the soil which would have cost the English farmer at least 50 cents. We are now getting less and less of this natural manure. We find an increasing necessity for furnishing manure to our land. We should now find it a hard matter to compete with the English and European farmers, if they could get labor at the old rates. But fortunately for us, and fortunately, as I think, for them and all concerned, labor is now nearly or quite as high there as here.—This places American farmers on a far better footing than ever before. Owing instead of renting our land, with a favorable climate, a rapidly increasing population, improved implements, and comparatively intelligent and skilled labor, we have good reason to take courage and push ahead with our improvements.—*Walks and Talks on the Farm, in American Agriculturist.*

The boxes or stalls in which the animals are kept should be of ample size, and as I said above, well ventilated, and above all, cleanliness should be most rigidly observed, not only in the stalls where the animals stand, but in the animals themselves. The change in their food should be moderate at first, for nothing is more conducive of systematic derangement as a sudden change of food and temperature. From the very commencement the hours of feeding should be most carefully attended to, taking care that the animals are kept unmissably clean and thoroughly comfortable. Some active farmers curry them twice a day (morning and evening), and this extra labor pays remarkably, for be it understood that in the currying process the blood is aided in its circulation through the body of the animal, and the skin assumes a healthy tone. The house, as already noticed, should always be of a moderate warm temperature, but on no account should its temperature be allowed to rise too high so as to cause perspiration, which is very injurious. Very great attention should in all cases be paid to the animal droppings, which should never, if possible, be allowed to get too watery nor too hard.

When the cattle are first put up to fatten they may be fed on rape, cabbages and the softer kinds of turnips, such as the Aberdeen, Norfolk and White Globe, always keeping the harder turnip, such as the Swedes, till the others are consumed, and when changing from one green crop to another it is always better to mix the different species together and give the mixture to the beasts for some days, so that the change may be brought about without causing a purgation on the part of the animal system.

I may here remark that when beasts are first put up to fatten, the soft turnips and cabbages invariably scour them; but if not per-

sent back to the cooking shed. A wisp of clean, sweet hay should next be given to each beast, their beds made down, and the attendants may then retire, leaving the animals to repose in quietness until the next hour for feeding arrives, which may be at eleven o'clock; again at three, next at half-past five or six, and finally at nine o'clock at night, when they may be left to themselves for the remaining part of the night.

Cattle fatten pretty well on roots and hay alone, and, according to the condition they present when first put up, they may be finished off for sale to the butcher in five or six months; but by using grain and other feeding stuffs, such as crushed corn and linseed cake in various proportions for a portion of the roots, more cattle can be fattened with the same amount of roots in considerably less time and more manure made, and of a richer quality.

The cereals generally used in feeding store cattle are wheat, Indian corn, oats and barley. Wheat is seldom used as a feeding material, because of its price being too high, a circumstance which precludes any chance of using it with profit. Indian corn is thoroughly valuable in producing fat; beans and peas act contrary, because of giving strength and development to the muscle and adding to the flesh of the animal. Bran meal, when mixed with other feeding stuffs, is productive of very great results in stall fed cattle.

The straw of cereals, and, indeed, of leguminous crops such as peas and beans, is of great advantage to the farmer who has not a sufficient quantity of roots for his beasts; straw, when chaffed and used in conjunction with other food, such as pulped mangolds, produces good results, provided it be used with good judgment.

When pulped mangolds and chaffed straw are given to animals, mixed with three or four pounds of bean meal or crushed oil cake per day, the beasts may be fattened very economically and with good results.

In the British kingdom, turnips and mangolds form the staple food for stall fed cattle.

Turnips depend very much for their value on the soil in which they are raised, and also on the way in which they are cultivated.—Some farmers are of opinion that the larger the bulb the higher is its feeding value; others, however, are of opinion that the opposite of this is the case. Without venturing an opinion on the matter, I should like to see medium sized bulbs produced in preference to very large ones or small ones. Chemists tell us that turnips (especially soft turnip) contain a large percentage of water, and that the larger the bulbs the more water it contains. Now, if a farmer wants to increase the amount of water in his feeding stuffs, I advise that the most economical and paying way for him would be to give the water in a pail or some such vessel, and when the animal, than to try and give it in the shape of large, spongy, watery bulbs. Of all the varieties of turnips grown, Swedes are the most nutritious; they keep longer in good condition than any other kind, of which the yellow is ranked next in value and durability to the Swede, and the white least of all.

IMPROVING DAIRY STOCK.

Every succeeding year finds farmers increasing their stock, laying out their land so as to best suit its successful management, each year developing great interest in the subject of the best breeds of cattle and the most profitable modes of managing them. With dairy stock it would almost appear as if there was no such thing as a standing still. Unless improvement is aimed at constantly by weeding out those members of the herd which are getting past a useful age, or, after sufficient trial, are found to be inferior milkers, and by occasionally introducing fresh and, if possible superior blood, through the agency of a sire there is great danger of retrogression. A herd of the retrograde is neither profitable or creditable to the owner; yet, care in breeding and selection, the farmer will find his stock decreasing in stamina, and consequently less productive. No bad milkers should have a permanent place in a herd kept principally for the produce of the dairy. To keep such a cow is simply to lose money willfully, her keep costing quite as much as the best milker in the herd, and the trouble she occasions just as much as that given by the animal which gives double the amount of produce. It may be difficult for some years to have a very cow in the yard first-rate, yet the herd may be so improved by judicious selection as to have good cows.

In a stock of a dozen cows we will suppose there are a few indifferent milkers. By testing the milk of the cows carefully, and a certain amount of butter or cheese they produce to be under the average of what might fairly be expected from the care bestowed on each, it is certainly economy for the owner to keep such farrow, and at the end of the season dry them off, and with some feeding get them in shape for the butcher, and get rid of them without any further loss. To fill their place, let half a dozen heifers come into the dairy,

STOCK & DAIRY

GOOD FOOD FOR FATTENING HOGS.

At the present price of corn, fine middlings and pork, there is more profit in feeding pigs in this section than we have enjoyed for some years. Furthermore, lard is in good demand, and packers discriminate in favor of fine-boned, well-fed hogs. In Chicago, "grassers" are quoted at 5 cents per pound, and dull of sale, while an extra, choice, well-bred and well fattened pig, would bring 9 cents, live weight. This is as it should be. The latter, even at this greater difference in the price, is far cheaper to the customer than the former. And it makes quite a difference to a farmer whether he has fifty "grassers" weighing 175 lbs. each, to sell at 5c. per pound, or fifty choice, well bred and well fed pigs, at the same age, that will average 300 lbs. at 9c. The former lot will bring \$437.50, and the latter \$1,200.00.

We ought to produce the best pork, lard, and hams in the world, and secure the highest prices in the English market. Instead of this, Irish hams are quoted in London at 22 to 24 cents per lb., and American hams at 13 to 15 cents. And there is a corresponding difference in the price of pork. I asked Mr. DeVoe, our largest pork packer, what was the reason American pork sold so low in Europe.

"Vot is the reason," he exclaimed, "I will tell you why. We think they are vools over there. We think anything is good enough for them. Pork that we would not eat here, we ship to Europe. I sent several barrels of pork as a present to my friends in Germany, and they said it was most excellent, but that most of the American pork they got was vile stuff. The Captain of a steamer running from Hamburg to New York once gave his crew American pork on their return voyage. Great was the grumbling. And when they got to Hamburg they refused to continue on the ship until the Captain had given them a written agreement to never again give them American pork!"

A large grocer and provision dealer in Staffordshire once told me that he bought a quantity of Ohio bacon and retailed it out at a good profit, and with much satisfaction to his customers. The next lot he bought was so poor that he could not dispose of it. "Since then," he said, "I have been afraid to deal in the article. If it was always as good as that first lot I could sell large quantities."

For many years we had the same state of things in regard to American cheese. Our cheese factories, however, are now making so good an article, and there is so much greater uniformity in the quality, that Am-



FOX HUNTING.

FATTENING AND MANAGEMENT OF CATTLE.

By T. O'SULLIVAN Assistant Agriculturist of the Kilkenny Model Farm, Ireland, and a Graduate of the Albert Agricultural Institution, Glasnevin, Dublin.

Article Number II.

Cattle fatten rapidly when fed on the soiling system, giving them a full supply of rye, grass, rape or clover, and with eighteen or twenty pounds of cut hay, and three or four pounds of bran or oat meal, or five or six lbs. of oil cake broken up and mixed with the cut feed given to the animals.

Some farmers who manage large farms of land, and who grow root crops in large quantities, fatten a number of cattle in stalls during the months of winter and spring. This system is called stall feeding. The beasts to be fattened are taken from the pastoral grass and placed in a house at the approach of the first winter's breeze. The house or houses in which the fattening process is to be carried out should be moderately warm, and never too close; there should be thorough ventilation, but no drafts of cold air. The beasts should be kept as quiet as possible in their respective stalls, "because every movement of the animal, as well as every excitement or irritation, causes a waste of animal tissue which is equivalent to a waste of food." An over amount of light sometimes causes the fattening animals to become restless and checks the development of the fattening process in a cordance with the amount of irritation produced in the system. It is advisable, therefore, to have the stalls darker than lightsome.

mitted to go too far, this mild purgation brings round a healthier action of the entire animal system, and by using some dry fodder, such as hay or straw, the excrements are soon changed to their proper consistency. When cattle are fed four times a day, the division of the time may be as follows:—In the morning as early as between the hours of five and six o'clock each beast should get a little hay in its trough, and this should be given while the stock managers or attendants are cleaning out the stalls and byre, and preparing the morning feed of roots. The kind and quantity of food each animal gets should be in accordance with the size of the beast and the views of the farmer. Let us say that each beast will average seven hundred weight when finished, and that they are fed on roots, such as mangolds, turnips and potatoes, and also on hay or straw; they may get each about one hundred and fifty weight of roots and twenty-eight pounds of hay daily. This will give forty-two pounds of roots for each of the four meals. Some farmers give the roots whole on the grounds that the animal is less liable to be choked while eating, and also that the exercise the animal gets while eating whole food warms the system and causes a thorough circulation of the blood through the upholders of this system I feel justified in saying that the better and more economical way would be to cut the roots in slices not more than half an inch thick, and without slices of this thickness let the farmer entertain no fear of his animals being liable to be choked, while if cut of a greater thickness there is.

After the animals have consumed the roots, and their hunger appeased, the trough of each respective animal should be instantly cleansed by the hand, and the refuse, if any,

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Such a course, persistently followed for a number of years, would make first-class milkers in our dairies and be more profit for the owners, while the herd would gain a character and reputation in the district for quality. Much can be done to improve the dairy stock by holding over the offspring of these cows which have proved themselves first-class milkers, and breeding only from those with a view of getting into a permanent strain of milkers as far as this can be done in a limited time.

But it does not always follow that a heifer whose mother was an excellent milker, will in turn inherit her mother's good qualities in this respect; but when the descendant of a celebrated line of pail fillers, the probabilities are altogether in her favor that she will possess in a high degree the good qualities of her race. By following such a line of policy as indicated, and taking care to secure males of noted milking stock, our dairy stock may be greatly improved, and, to say the least, far superior to the bad selection of farm stock, bred with no reference to milking qualities.—*Farmer (Eng.)*

KEEPING FERKIN BUTTER.

The dairy product of butter, outside of the districts of country around our cities and large towns available for daily marketing, must necessarily be put up, or packed in tubs made of white oak, holding 25, 50, or 100 pounds weight. The packages are known in the market as tubs or firkins. The value of this butter depends upon the care taken to free it from the buttermilk, and the knowledge and taste required to flavor it, by the proper use of salt, and the neatness with which the whole process of making is characterized.

The consumers are obliged to pay from twenty to forty cents per pound more for butter brought to their cities and large towns weekly than the average market price in our country, made and packed butter—this, too, when its intrinsic value is no more.

This is owing entirely to the want of proper knowledge of the mode of preservation after it comes into possession of the family by whom it is used. The country-made and packed butter is kept in the dairy cellar or spring house from the date of making until sent to market, retaining all the qualities as when first made.

This is done by excluding the air by the simple process of keeping the package covered with brine made of pure salt, strong enough to float an egg. When sold, and as soon as it is to be delivered, the brine is to be drained off entirely by reversing the package and leaving it bottom up for twelve or twenty-four hours. It is then headed up, and goes to market without brine. The consumer is interested in getting possession of his supply as soon after it leaves the dairy cellar as possible.

He should first take out the head, driving the hoops back to their place, and then make a brine of pure water and Ashton salt, and covering the butter with it, and keep it covered until the last pound is used. The butter kept just covered is easily cut out of the size required for use, and if then held under the hydrant or picher, and water poured over it freely, it will fit for use as good as the first.

No fear is to be entertained that the brine will impart its taste to the butter. The office it performs is to prevent the air from contact with the butter. The writer knows that firkin butter has been kept a year by this simple and inexpensive process as sweet and with all the flavor it possessed the day it was made and packed.—*V. E. Poidet in Country Gentleman.*

CURING AND PRESERVING MEATS.

An interesting paper on this subject was read at a meeting of the Princeton Farmers' club, by Mr. R. Guild, and by a vote of the club, on motion of ex-Gov. Olden it was forwarded to the *Country Gentleman* for publication. He begins explaining and enforcing the superiority of well-matured meat over that of younger animals, and the necessity of cooling off the animal heat promptly and completely, before any further steps are taken. He then explains the use of salt in the preservation of the meat, showing that as little salt should be used as is consistent with the preservation of the meat, and that in the curing of dried meats brine should be altogether excluded. He then continues as follows:—

What is known in commerce as the "sugar cured hams" are packed in bulk with ground salt at such time, or from time to time, as convenience may dictate; the time they remain in bulks is also governed by convenience. They are at length packed in hogs-heads filled with what is called sweet pickle—composed of salt, saltpetre, and molasses. Many of them are shipped from the west in this condition, smoked here and sold for Jersey hams. The consequence is, there is little uniformity in their quality. Some of them are very good; others over-salted, hard and tasteless.

The celebrated Burlington hams of the olden times (Newbold, I think, was the name,) were cured in this wise:

To 12 hams, 8 lbs. sugar, 1 1/2 lbs. saltpetre, 5 lbs. fine salt; rub the hams with this mixture, and let them be one week in a cask with the skins downwards; then make a pickle of the strongest coarse salt, of sufficient strength to bear an egg; add two or three quarts of hickory ley, refined by boiling; when cool, cover them.

The receipt of Abraham Hunt, of Trenton, was—For three dozen hams, 3 lbs. saltpetre, 12 lbs. fine salt, 1 1/2 gallons molasses; mix them well together, and rub the hams well; let them lie twelve or fourteen days; then make a pickle that will bear an egg, and cover the hams with it. After laying three or four weeks in pickle rub them with bran and hang them up to smoke.

The receipt I have adopted for my own use is as follows:—For twelve hams, 1 lb. saltpetre, 12 lbs. fine salt, 1/2 gallon molasses. These ingredients, when well mixed, will have about the consistency and appearance of damp, brown sugar. Rub them thoroughly with the mixture, lay them singly on a dry platform. At the end of one week rub them again; at the end of the second week again rub them and hang up to smoke; let them dry thoroughly, but do not smoke them more than ten days.

It will be perceived that all the foregoing receipts embody the same principles, and differ only in the mode of compounding the ingredients and their application; and I am frequently amused to see some newly fledged agricultural journal publishing a new receipt for curing bacon hams, when in principle if not in words, it is precisely the same that was used more than half a century ago.

In regard to smoking meat, it has been practiced in this country since time immemorial but I do not deem it essential to its preservation. Many persons like a slight flavor of smoke, others do not. Meats cured for the English market are never smoked, and I have known persons to kiln-dry their meat as they would their tobacco. It is necessary, however, to have it thoroughly dried. I would not be understood to entirely discard brine. In some cases it is not only valuable but indispensable. The sides, or what is known as mass pork, being nearly all fat, possess neither fibrous nor albumen and consequently cannot be injured either by salt or water, and can be kept sound and sweet an indefinite length of time by simply keeping it covered with pure brine, or, as the gentleman from Wheatland suggested at our last meeting, by keeping it covered with salt, and taking it to the pump now and then and filling the cask with cold water. I would advise, however, drop a caution. All brine requires to be assiduously watched and kept pure. It extracts the juices of the meat; they being lighter than the water saturated with salt, rise to the top, become exposed to the air and soon decompose, thereby contaminating the whole contents of the cask. The following recipe for making brine, in my opinion, is the best that has fallen within my observation:—

Six lbs. salt, one pint molasses 6 oz. saltpetre; dissolve them by boiling 4 gallons of water. In the pickle, when perfectly cool, keep any sort of fresh meat suet and closely stopp'd. This pickle may be kept pure, and its strength undiminished for almost any length of time, by occasionally reboiling it and skimming off the impurities; but as old brine is an excellent fertilizer, and salt is not expensive, I would recommend that the old brine be thrown on the asparagus bed or compost heap, and freshly made brine be substituted.

Opinions in relation to the best mode of preserving meats after they are cured, are as diversified as they are in regard to the mode of curing. The hams cured with canvas and white-washed, are invariably advocates packing them in chaff, bran, ashés, &c. Others, after smoking, immerse them in brine; others again packing them in air-tight barrels. The manner of keeping is not so essential as the time at which they are put up, and hence the necessity of not consuming more time than is necessary in curing. If they are not secured before the fly deposits its eggs upon them, no means whatever will save them, except, indeed, keeping them in a temperature so low that the eggs cannot hatch, or immersing them in brine. For any considerable quantity, I prefer the tight barrel system. But for family use, I have found a rough, swinging shelf, the sides and ends of which are covered with wire cloth (in which the pieces are hung) every convenient and secure against both flies and vermin of every description.

Now, Mr. President and gentlemen, if the foregoing premises be correct, I am led to the following conclusions:—

1. To have cured meats in perfection, no animal should be slaughtered until it has in some degree at least attained its natural growth.

2. All meats should be promptly and thoroughly cooled before being slaughtered. If in cold weather, by hanging in a cold place at least 48 hours and as much longer as will be consistent with its keeping sound, but under no circumstances let it freeze.

3. No more salt should be used and no more time should be consumed in curing

than is necessary to its safe keeping, due regard being paid to the size of the pieces, the temperature of the weather, &c.; and as little water should be used as is consistent with cleanliness.

4. They should be thoroughly dried before storing away, but smoke is not essential to their preservation.

To preserve them after being cured, they should be stowed away in a cool and well ventilated apartment before the fly can possibly reach them. In this climate, I should say not later than the middle of February.

DANGER OF GREEN FODDER.

J. J. Mechi, of London, England, states that a person who was accustomed to supply his teams with green feed, lost two cart horses worth £150. One was found dead and distended in the morning, the other died in the course of the day, and another person lost two cows. Young green tares, especially when cut immediately after rain, are most dangerous, with the ordinary mode of placing them before the mals in unlimited quantities as cut by the scythe. The losses caused by this system in their annual total must be enormous. For thirty years we have avoided such losses by invariably passing all green food, tares, grass, Italian rye grass, color the green beans through the chaff-cutter. According to the condition of its growth, we mix more or less of fine-cut straw or hay chaff with it. This absorbs its superfluous moisture and prevents flatulence, distensions and death. The same principle is applied to pulped roots—pulped cabbage, kohlrabi, mangel—the latter being more dangerous early in the season unless so mixed. The cost of doing all this is a trifle as compared with the serious losses occasioned by its omission. The value of a single animal would pay the extra cost for several years. In fact, I have long since arrived at the conclusion that the turning out, roaming at large and whole food system will be given up by those who prefer profit to loss. Over-ripe feeds, either tares or clover, which are rough and indigestible; require comminution. Of course, in such a case, being deficient rather than overfull of moisture, they do not require straw chaff, or at all events, very little of it. If horses are to have water, it should be before eating green tares in a wet state, or after. Bean meal should be intermixed with or attached to the cut food in the manger so that the animal cannot take it unmix'd. Our horses coming in from work are not allowed to drink cold water until after having eaten a little manger food.

UNPROFITABLE SHEEP RAISING.

All flock masters have in view the object of making the flock pay, but each goes about it in an entirely different way. One cares well for the flock, and makes them as comfortable as may be at all times; another lets them take care of themselves. These last are usually looking for some better breeds, and imagine their sheep are "run out," or they have had them too long. I have a great deal of sympathy for a flock of sheep in this situation. They are placed very much as the Israelites of old were when commanded to make brick without straw; much is expected from them and very little done for them.

The probabilities are that one-half of the sheep kept in this country are cared for in this slipshod manner. Their owners consider them property, and neglect them in every possible way, only waiting for their sheep are not in which they do not get as buyers. When the cold fall rains and snows come, the owners know them to be in severe storms, but imagine the sheep can stand it. The consequence is, that when winter sets in the sheep are low in flesh; they are not thought to be doing well, and the owners expect to have some early lambs to sell at a good price, to make up the loss for all former bad treatment and neglect. When the early lambs appear, many ewes have twins; none have nourishment enough for one lamb; much less two; many die from want of shelter. By the time grass comes, the lambs are stunted, and the ewes are poor beyond description. On many the wool is entirely off the body and on many two and one-half to three pounds of inferior wool, the lambs are not fit for the butcher, ferrier wool, the lambs are early lambs vanishing, and the profits from the early lambs vanishing. These farmers naturally conclude that their sheep business is unprofitable; they think sheep should pay better. This is the way to make the flock pay.

The other class of flock masters keep as many sheep (or a few less) as they have good feed for in summer, and comfortable accommodations for in winter. If the aim is to breed pure bred stock, they select the best specimens of the stock to be found, whether long or fine wool, breeding out all such as do not come up to the standard of what may be called excellent. If on the other hand, it is thought best to breed a practical sheep, one for wool and mutton, and for lambs for the butcher, they select the best from natives in the country, ewes of good age, say from two to three years.

IMPROVED FEEDING CATTLE.

The enquiry this year in the west for young short-horn bulls, far exceeds that of any former period. Beef cattle are now commanding a very good price, compared with the going rates during the past winter. It is becoming evident, too, that the demand is increasing for young, well bred and well fed bullocks, in place of the very large and excessively fattened beasts, which have heretofore commanded top prices. The advantages of the short-horn cross, viz., early maturity, which means rapid growth and ability to make flesh at any age, the most meat in the best parts, and the meat in all parts of the carcass of superior quality. These advantages are well established, and admitted in all the leading markets of the world, and the farming public, always conservative about innovations, very cheerfully grant the same thing now, and are acting upon the admissions with becoming promptitude. Those farmers who are first to move in the matter of improving their cattle stock, will be first to obtain more pounds and better quality of meat from a given amount of grain and grass, and prices in the market to correspond with these advantages.

The cattle business is but in its infancy in this country, as those who are familiar with it now, and live to see the cattle stock in the west twenty five years hence will see. Even the uncouth Texan, whose form is a mass of defects, those parts shrunk and diminutive, where the fullest development and the most meat should be, will only be partially recognizable in ten years, and not at all in twenty. Capital and enterprise have gone southward and westward, and capital is too wise to remain more than temporarily in inferior property.

Experts in the manufacture of any leading staple, or useful thing, very soon learn to condemn second rate machinery. The farm beast, bred for its flesh, is only rightly viewed when considered as a mere machine for the conversion of crude grain and grass into human food, and the man who accepts this as true, and all do who act upon the general proposition involved, though not every one works the matter out logically, though the results reached bear the logic out fully, is a wise man in his line of business, and his wisdom will profit him abundantly.—*Farm Journal.*

ARTICHOKEAS AS STOCK FOOD.

A correspondent of the *Kansas Farmer* relates the following experience with artichokes:—

I planted about one-fourth of an acre with about one half bushel, cut very small, dropped in the furrows two feet and a half apart and also the even inches apart in the rows; give them about the same attention as potatoes. Early in September I cut them before frost and used the stalks to roof my stable, thinking they were good for nothing else; but I found it very difficult to keep my horse from eating himself out of doors. He would leave corn and hay for these stalks. I think I had about fifty bushels on the one-quarter of an acre, but they were very small which made it tedious gathering them. I think they were too thick, I shall plant again this year. Top the stalks once or twice during the season, to make them "stocky;" cut before frost, shock as corn, when cured, stack and cut them in a machine, mix with bran, steam or cook them if convenient.

I think they will furnish a large amount of valuable feed. I think the roots or tubers will grow all winter, when the ground is not frozen. Dig in the spring, or turn your hogs in to dig them for you. They are choice feed for milch cows, and, coming as they do early in the spring, when succulent food is scarce, help the yield of butter.

CATTLE DISEASE IN CALIFORNIA.

The spinal meningitis is reported to have broken out among cattle owned by Elmer Fairchild a cattle dealer and farmer of Newton, Conn. Out of eleven large four year old steers, brought from Michigan, seven were seized with the disease a number of days ago. Mr. Fairchild being unacquainted with the nature of the disease, thought the cattle had been poisoned. Two days afterwards one of those affected died, and the following day another died, and a third was seized with convulsions. A post mortem examination revealed the disease to be as above stated. The kidneys were also found to be highly inflamed. The farmers of this section were alarmed for the safety of their own cattle, and the case having been brought to the notice of Mr. Gould the Connecticut cattle commissioner, he sent word that he would soon come and make an investigation for the benefit of the cattle raising interest, and report it.



MINNIE MAY'S DEPARTMENT.

I have not heard from as many of my correspondents this month as I would have liked; however I suppose you have all been busy, as I have been myself. There is so much to do in the house, getting ready for winter; warm clothes for the children and ourselves, and husbands also. It takes a great many stitches, just as well as logs of wood, for warmth during the winter.

This reminds me that one of my correspondents has sent a letter attacking patchwork quilts as too much work for their value when done—too much expense in making, and too many other necessary duties neglected in order to attend to them. Let me hear from some of you on this subject. I don't myself quite agree with the writer. Another friend is opposed to "Bees"—not the winged animals, but "Quilting Bees," "Husking Bees," "Paring Bees," &c. What do you think of that? Why, the next thing some one will advocate will be to do away with eating or courting! I was very near forgetting to tell you that a sister has led the way and become Secretary to one of the Granges, at least, so Uncle Tom tells me. The men thought they could keep all these kinds of offices to themselves and put us off with the special ones, but I think we can show them we are just as capable for these offices as they can be, and are just as willing to work, too.

MINNIE MAY.

South Stukely, P. Q.

Dear Minnie May,—

I have taken much interest in your column of late, and have tried a few of the recipes with good success. Here are a couple of mine.

TAMER ATKINSON.

STEWED TOMATOES.

Peel and slice the tomatoes in a sauce pan; add half a cup of vinegar, 2½ tablespoonsful of sugar, a piece of butter the size of an egg; salt and pepper to taste. Stew 15 minutes and serve hot. (Tamer has forgotten to say how much tomatoes to use.)

SAUCE FOR PUDDING.

Two tablespoonsful of flour in half a cup of cold water; stir well to prevent lumps; pour into a pint of boiling water and let boil four minutes; add half a cup of vinegar, 3 tablespoonsful of sugar, and butter the size of a butternut; season with lemon. T. A.

CHICKEN PIE.

Boil the chicken in water sufficient to make a good dressing, till the meat will easily slip from the bones—the latter to be all removed. Mix the meat well together, season with salt, butter and a little flour.—Make a crust in the usual manner, line dishes two or three inches in depth with crust, put in the meat with plenty of gravy, paste over top and bake an hour. This is a great improvement upon putting in the bones, as it does away with the choice in the parts.

JENNY CLARK.

HOW TO FRY POTATOES.

Boil potatoes nicely with the skins on. When cold, peel and slice, chopping the slices lightly. Have ready a pan with a small quantity of butter—about one teaspoonful to six slices; put in the potatoes and brown lightly, seasoning with salt and pepper. Just before serving, turn over them half a cup of good cream, stir and send to the table hot.

CABBAGE.

Shave as fine as possible—put in your kettle, in which have a little boiling water; cover, and when it begins to be tender, salt it; when done very tender, leave the cover off; add some butter (or the fat fried from

salt fat pork is better) and pepper, and vinegar or not, as you like. Let the cabbage cook down as dry as possible without burning, stirring it frequently. Be sure and cook it until it is perfectly tender. It generally takes more than an hour.

PARSNIPS.

Scrape and split them, and put into a pot of boiling water, and cook until tender.—Dress with plenty of butter, salt and pepper. Or you may parboil them, and dip into beaten egg and grated cracker, and fry in hot lard. They are very good baked or stewed with meat.

KATE.

FOOD FOR CHILDREN.

Milk, bread and rice should be the principal food for children, because these articles are of very easy digestion, requiring only about two hours for that purpose; whereas animal food, most vegetables, cakes and pies require a much longer time. It is natural for children to be taking food much oftener than adults, and if they take fresh food into the stomach before that previously received is digested and passed therefrom, it deranges the action of the stomach, prompting fermentation, indigestion, and all the long train of dyspeptic evils.

The temperature of the body in children being higher, all their functions are in more intense action and their respiration consequently more rapid; hunger recurs much sooner, and is felt much more keenly than in adults. And as long as the body is growing, more food in proportion is required than after it has attained its full growth.

MRS. L.

QUALITY OF FOOD.

As to the quality of food we eat, there can be no doubt that the more simply it is cooked the more easily it is digested. Potash is a substance that dissolves metals, but we do not hesitate to eat salaratus which is a modified preparation of it, and has the same though a more gradual effect upon the organic tissues and the blood. Spices destroy the flavor of other articles of food, and make an unnatural and injurious stimulus to appetite.

The first object of a house-keeper should be to procure unadulterated articles of food. In cities especially, and also in the country to a certain extent, this is very difficult. There are but few articles that are not adulterated; even wheat flour, sugar, salt, coffee, spices, teas, farina, and, indeed almost all prepared articles are impure. Pie crust and other shortened articles of food are almost wholly indigestible by many persons, remaining a long time in the stomach producing eruptions and other dyspeptic symptoms.

SQUASH PUDDING.

A quart of well stewed and sifted squash, a quart of grated bread, a teaspoonful of salt, six eggs, a pound of sugar, a flavoring of mace or lemon, and a quart or three pints of good cream, will make a very nice pudding. Line the pudding dish with thin potato paste.

CARROT PUDDING.

A pint of carrot that has been stewed well and sifted carefully, to three pints grated bread or crackers, added to a quart of cream, six eggs, salt, mace or lemon, and a pound of sugar, will make a very nice pudding.

BOILED INDIAN PUDDING.

Four teacups of Indian meal scalded with a quart of boiling water, two teaspoonfuls of salt, two gallons of molasses, two cups of stewed apple. Tie in a cloth so as to let it swell one-third, and boil three hours. This pudding is very good eating with roast beef.

FLOUR AND INDIAN PUDDING.

Four teaspoonfuls of flour, flour of Indian meal, four eggs, one quart of boiling milk, one cup of molasses, one teaspoonful of salt; pour a cup of cream over it just before it goes into the oven. Bake three hours.

ANNIE H.

PLAIN CHEESE CAKES.

Turn three quarts of milk to curd, break it, and drain the whey; when dry, break it in a pan, with two ounces of butter, till perfectly smooth; put in it a pint and a

half of thin cream or good milk, and add sugar, cinnamon, nutmeg and three ounces of currants. Put a light puff paste in the pattypans, and three parts fill them.

HINTS AND AIDS FOR HOUSEKEEPERS.

It is by far an easier matter to write upon the subject of housekeeping, than it is to, in an easy, quiet and systematic manner, perform the labor of a household. By means of the pen, however, many valuable hints and aids may be given to housekeepers, which if properly used, will lighten their labors and lessen their cares. As good housekeeping is a matter of utmost importance in all communities and to all classes, so a good housekeeper is a person to be loved by the household, and respected by all.

At many places where I have called during the fall, I have found the ladies engaged in preparing rags for carpets. These carpets are warm, neat, heavy, and usually wear well. The following is a cheap way of coloring cotton rags a beautiful and permanent blue. Take a large brass or copper kettle, have it dry and rub the whole inside with soft soap. Let the kettle stand until the following day, then pour in water, wash the soap down into it, and let it boil a half hour, then add one-fourth of a pound of longwood chips and boil one hour, then put in the cloth and boil or keep hot until a proper color is produced. This will usually take about two hours, and will color five pounds of rags. They should be dried before washing.

To live within the limits of the income, and promote the health and comfort of the whole household, should be the aim of the housewife, and she should strive continually to accomplish these ends. Cheerful countenances and pleasant conversations, with pleasant and laughable anecdotes happily related, conduce to both health and happiness. During the long winter months when people must remain so much in doors, one often gets tired of the surroundings, or weary looking at the same arrangements and surroundings. This tiresomeness can often be relieved by changing the places or arrangement of the heavy articles of furniture. Beautiful pictures, vases, and winter bouquets of natural flowers that often cost but little, save the time taken in gathering, especially in the rooms of aged people and invalids. Beautiful and bright-colored table and stand covers, chair cushions, etc., all help to make rooms look cheerful and pleasant.

Very beautiful and serviceable rugs may be made in the following way: Procure an old coffee sack of some grocer, then gather up all the scraps and bits of worsted and flannel, and tear or cut them into desirable lengths, thread them into a large darning needle and draw them through the cloth, taking only three or four threads of the coarse cloth, in such a way as to leave both ends of the scraps on the side of it. The scraps should be drawn in so closely as to cause them to stand up. The bits must be short enough to stand up and so closely drawn in as to cover all the canvas, which must be bound or hemmed. These can be drawn in so as to form diamonds, squares, or flowers. These being made of the bright rags, the space above them is filled with more somber colors.

CRACKED STOVES.

Don't let your stoves smoke, merely because there is a crack in it; but take common wood ashes and salt, make a paste with a little water, apply it to the aperture and the crack will be closed in a moment. It can be put on when the stove is hot, as easily as when it is cold.

We do not know a single plant suitable for growing in the ordinary air of living rooms that will stand so much hard usage as the ivy. The only point on which cultivators err by neglect is the failure to keep its leaves well washed and clean. If this be done two or three times a week, and the soil watered as often, it will grow for weeks and even years without danger from change of temperature.

Ivy will succeed better in our dry, warm rooms than almost any plant with which I am acquainted, and all that is needed to make it attractive is the exercise of a little ingenuity in the appliances for its home. A vase, not necessarily costly by any means, will answer a good purpose; and this reminds me of an excellent idea I lately noticed in a foreign periodical for growing this very

plant. Long shoots of the ivy were procured, with the young and tender aerial roots very abundant; the lower ends were wrapped in moss, and then some five or six of these were tightly tied together at the bottom and placed in the vase. Fill the vase within a few inches of the top, and suspend the ball of moss therein. The roots will soon commence to grow; afterwards the moss should not quite reach the water, as the roots will extend down into it, and prove all-sufficient. So many very beautiful varieties of ivy are now in cultivation that, by selecting kinds that will form a decided contrast in shape and color, the effect will be sensibly heightened. The centre of the vase may be filled with cut flowers or grass; indeed, nothing would look better than ferns.

The ivy may be allowed to hang down over the sides of the vase in graceful festoons, or else trained over and round the window, thus making a room look cheerful and pleasant all the winter long. It is not necessary, and, in fact, I do not believe it will grow as well in the strong light as when in a partially shaded position, as the ivy loves shade, and an even, cool atmosphere. I have known instances where ivy has been grown in large tubs, and turned up a staircase, thus forming a mass of green foliage from the hall below to the floor above. Used in any way, as fancy directs, it is unexcelled as a house plant.

THE KIND OF FIRE NEEDED.

Custards require a slow fire, else they will boil and whey out before they are done. Puddings need a hot fire, particularly Indian pudding, for they are all the better for being wheyed out.

TO COOK HUBBARD SQUASH.

Cut it open; seed it; turn the cut side down in a pan with some water in; set it in the oven; when done scrape it with a spoon; mash with a potato pounder; season; serve.

WILD CRAB APPLE JELLY.

Cover the fruit with water and boil until soft, then strain; add one pound of sugar to each pint of juice; boil from fifteen to twenty minutes.

A PERFECT HOME.

The most perfect home I ever saw, was a little house into the sweet incense of whose fires went no costly things. A thousand dollars served for a year's living of father, mother and three children. But the mother was the creator of a home; her relations with her children were the most beautiful I have ever seen; even the dull and commonplace men were lifted up and enabled to do good work for souls by the atmosphere which this woman created; every inmate of her house involuntarily looked into her face for the key note of the day; and it always rang clear. From the rosebud or the clover leaf, which in spite of her hard housework, she always found time to put by our plates at breakfast, down to the story she had on hand to be read in the evening, there was no intermission of her influence. She has always been and always will be my ideal of a mother, wife, home-maker. If to her quick brain, loving heart and exquisite face had been added to the appliances of wider culture, hers would have been absolutely the ideal home. As it was, it was the best I have seen.

HELEN HUNT.

KEEPING PEARS AND APPLES.

The apples and pears should be placed in grazed earthen vessels, each containing a gallon, and surrounding each fruit with paper. These vessels being perfect cylinders, about a foot each in height, stand very conveniently upon each other, and present the means of preserving a large quantity of fruit in a very small room; and if the space between the top of the vessel and the base of another be filled with a cement, composed of two parts of the curd of skimmed milk, and one of lime, by which the air will be excluded, the later kinds of apples and pears will be preserved with little change in their appearance, and without any danger of decay, from October till February and March. A dry and cold situation, in which there is little change of temperature, is the best for the vessels; but the merits of the pears are generally increased by there being taken from the vessels about ten days before they are wanted for use, and kept in a warm room, for warmth at this, as at other periods, accelerates the maturity of this pair.—*Germantown Telegraph.*



have our work ready for to-morrow done up. There are plenty of troubles to pay for, but when you don't forget to be along with the sport, but once, write and

I was very upon opening to find a splendor to me by one not say, though her own

It makes me my nieces get can't be prevented

I paid a very nice and very pleasant what a quantity splendid and the young folk is over now, so have apples gathered some lamps are lit, regular romp—but "How,

Hattie Havful to have a Tom and boy cold altogether I got down to ing to picnic a

Maggie Mar the family pians to know discovered our say; my little that is any inf it; and I call ically comes is anything good again, Maggie.

Here is a letter, but is late in the sea

Dear Uncle T

I have just ducks (I have water—such almost all the warm. I put 1 up at me so pl thank me for t

I want to tell kitten; it was When Eddie o comfort him, a play hide-and hide and call k look around t up in his face I now from your

Stone

Dear Uncle T

Will you all phew? On rs (I don't kr until I am ado good old Prince bad. I should of your nephew representative think our cous when she said for I have a s myself, and she have no puzzle wait until we whether this let in your pocket. I your family, I

Rednersville

All right, W

now; see that y



UNCLE TOM'S COLUMN.

The long winter evenings, the happy hours of the farmer's family, are now approaching. Let us be preparing for them. The first thing necessary before we can enjoy our leisure hours is to feel that we have our work completed. Are your lessons ready for to-morrow's school? Are all the chores done up? Then if they are, we can have plenty of fun, and not worry about trouble, to pay for it in the morning.

When you get at it, enjoying yourselves, don't forget Uncle Tom. He would like well to be along with you, and would try to lead in the sport, but as he cannot be everywhere at once, write and tell him what you did. I was very agreeably surprised the other day upon opening a package sent to me by express, to find a splendid piece of wedding cake sent to me by one of my Quebec nieces. She did not say, though, whose wedding it was; whether her own or some one else's.

It makes me feel dreadfully old to think of my nieces getting married, but I suppose it can't be prevented. I paid a visit last month to some of my nieces and nephews in this vicinity, and had a very pleasant time. You ought to have seen what a quantity of melons I eat. They were splendid and I could not help it, and I believe the young folks were just as bad. Melon time is over now, so when I go to see you I will have apples and cider, and perhaps you have gathered some nuts; we will tell stories until the lamps are lit, and then have games and a regular romp at the end. Oh, it will be jolly—but "How, when and where?"

Hattie Haviland thinks it would be delightful to have a picnic of all my family, Aunty Tom and boy included. Oh dear, no! Too cold altogether. Next year, maybe, but when I get down to Ingersoll, if ever I do, I am going to picnic at that house.

Maggie Manning says she has found out by the family picture that I am married, and wants to know by what name to call this newly discovered aunt of hers. Well, it's hard to say; my little girl calls her "mamma." If that is any information, Maggie is welcome to it; and I call her—oh, never mind, she generally comes without calling, especially if there is anything good going on. Please to write again, Maggie.

Here is a letter which was mislaid when received, but is too good to destroy even if it is late in the season:

Tilsonburg, May 19th, 1874.

Dear Uncle Tom,— I have just come in from setting one of my ducks (I have six); her nest is close to the water—such a nice nest—and she has plucked almost all the down off her breast to make it warm. I put 15 eggs under her, and she looked up at me so pleased, just as if she wanted to thank me for them.

I want to tell you about my little brother's kitten; it was the wisest thing I ever saw. When Eddie cried it always ran to him to comfort him, and it was such fun to see them play hide-and-seek together. Eddie would hide and call kitty, and she would run and look around till she found him, and then look up in his face for him to hide again. No more now from your loving niece,

AGGIE FRANCIS.

Stone Ridge Farm, May 15th, 1874.

Dear Uncle Tom,— Will you allow me to become one of your nephews? On looking over my cousins' letters (I don't know that I can call them cousins until I am adopted), I cannot find one from good old Prince Edward. I really think it too bad. I should be proud to be considered one of your nephews; but more so to be the only representative of our beautiful county. I think our cousin, Aggie Smith, was about right when she said big brothers wasn't a humbug, for I have a sister some years younger than myself, and she don't consider me as such. I will have no puzzles to send in this month. I will wait until we are better acquainted and see whether this letter slips through the great hole in your pocket. Hoping I may be adopted in your family, I remain

your would-be nephew,

WM. H. ECKERT.

Rednersville P. O., Ont. All right, William; you are in the family, now; see that you help in the work.

And now you are all going to be sorry. Your cousin, Willie Rutherford, whom we all like so much, has been unfortunate. His father's store was burned on the night of the 18th of August, and he had barely time to escape with his life. He lost his watch and his gun, and a great many other knick-nacks of his own, including the family picture (he has sent for another of them). I know that you will all feel for him in his trouble.

HIDDEN RIVERS OF ASIA.

276.—I went in, dust and all. 277.—O Bill you bad boy. CANADIAN CUFF.

278.—I express an odd number; behead me and I am even. What am I?

279.—Without me, city ne'er arose, Nor would man find secure repose; Behead me and a stream I flow, Through northern England's moorlands low; Again behead me and I am Just what my whole is unto man.

SQUARE WORDS.

280.—The title of an emperor; a division of the earth; a girl's name; to peruse a book. 281.—My first is what eagles do, My second is less than twice, My third is a portion of land; My fourth is too weak for a cane.

282.—There were fifteen travellers who stopped at a public house and called for a dinner. It was served up and placed upon a three-cornered table, five sitting on each side. They invited the landlord to dine with them. After they had finished their meal, they proposed to count, commencing at some one, and count five, and whoever counted five was to leave the table, or in other words every fifth man step out. They further agreed that the last man left was to pay the bill. They so counted as to have it fall upon the landlord.—Now, what seat did the man occupy who started the count?

ANSWERS TO OCTOBER PUZZLES.

267.—Timothy Johnstone courts Susanah Dunn. It was Dunn when it was begun; it was Dunn when it was half done, yet it wasn't Dunn when it was finished, for it was Johnstone. 268.—Rhubarb. 269.—Car-pet. 270.—Pennsylvania. 271.—Durham. 272.—Fox. 273.—Elbe. 274.—Herring. 275.—Bass.

GAMES.

11—BLINDMAN'S BUFF, SEATED.

The company arrange themselves in a circle upon chairs, which are placed very near together. The person who offers to play the part of the blind man allows a handkerchief to be bound over his eyes by a person who undertakes this part. The players hastily change their places to baffle his sagacity. Then he approaches the circle without groping, for this is expressly forbidden, and seats himself in the lap of the first person he comes to, and without feeling, but by listening to the stifled laughter around, to the rustling of the robes (the sound of which often discovers the wearer), or perhaps by a fortunate guess, he is enabled to tell the name of the player upon whose lap he is seated; and in case he is unacquainted with the name of the personage, describe her in such a manner that she can be recognized. If the blind man guesses correctly, the person discovered takes his place, puts on the bandage and performs the same part; if, on the contrary, he is mistaken, the company clap their hands to inform him of his error, and he renews the experiment in the same manner and without employing any other means than those authorized by the game. It is customary for the company, in order to prevent the blind man from recognizing persons too readily, to resort to various stratagems, as, for instance, some spread over their laps the skirts of their neighbors' dresses, others cover their's with the cushions of the chairs, and the ladies who are dressed in silk place their shawls over their laps; in fine, all try to disguise themselves in the best manner possible.

12—BLIND MAN'S BUFF BY THE PROFILE.

In this game the blind man's eyes are not bandaged, but he is, notwithstanding, obliged to exercise all his penetration. A piece of white and rather fine linen is stretched upon a frame like a screen, in the same way as when exhibiting a magic lantern. The blind man is seated upon a stool, so low that his shadow is not represented upon the linen which is spread over the screen. Some distance behind him a single lighted taper is placed upon a stand, and all the other lights in the room are extinguished. When these arrangements are made the rest of the company form a kind of procession, and pass in single file between the blind man (who is expressly forbidden to turn his head) and the table upon which the light is placed. This produces the expected effect;

the light of the candle, intercepted by each of the company in turn as he passes before it, casts upon the piece of white linen a succession of shadows quite accurately defined. As these shadows pass before him, the blind man is obliged to name aloud the person who he supposes is passing at the moment, and the errors into which he falls cause shouts of laughter, more or less prolonged. It is hardly necessary to say that each one, as he passes before the light, tries to disguise his air, his height, his gait, to prevent his being recognized.

13—PORCO, OR ITALIAN BLIND MAN'S BUFF.

Several persons, male and female, join hands so as to form a circle, and one person, who is blindfolded, is placed in the centre with a small stick in his or her hand. The players dance round the hood-winked person, who tries to touch one of them with the wand, and if he succeeds the ring stops. The player then grunts like a pig—hence the name of the game—crows, or imitates some animal, and the person touched must endeavor to imitate the noise as closely as possible, without discovering his or herself. If the party touched is discovered, then the hood-winked player transfers the bandage and the stick to that person, and takes the vacant place in the ring, who once more resume the dance until another person is touched.

14—FRENCH BLIND MAN.

In this game, instead of blindfolding one of the players, his hands are tied behind him, and in that difficult way he must endeavor to catch one of his companions, who must, when caught, submit to the same restraint.

15—THE RIBBONS.

Each person in the company takes a ribbon and holds it by one end. The other ends are all united in the hand of the one who leads the game, and who consequently is placed in the middle of the circle. When he says 'pull' they must let go; when he says 'let go,' they must pull the ribbon which they hold. It is astonishing how many forfeits are won at this simple game.

16—THE COTTON FLIES.

One of the players takes a flake of cotton or a bit of down, which he casts into the air in the midst of a circle formed by those present, who are seated close together. He at once puffs with his breath to keep it floating in the air, and the one towards whom the flake takes its course must puff in the same manner to keep it from falling upon his lap, which would cost him a forfeit.

17—THE HUNTSMAN.

One of the players is styled the 'Huntsman,' and the others must be called after the different parts of the dress or accoutrements of a sportsman; thus, one is the coat, another the hat, whilst the shot, shot-belt, powder, powder-flask, dog and gun and every other appurtenance belonging to a huntsman has its representative. As many chairs as there are players, excluding the huntsman, should next be ranged in two rows, back to back, and all the players must then seat themselves. Being thus prepared, the huntsman walks round the sitters and calls out the assumed name of one of them; for instance, 'gun,' when that person immediately gets up and takes hold of the coat-skirts of the huntsman, who continues his walk and calls out all the others one by one. Each must take hold of the skirts of the person before him, and when they are all summoned, the huntsman sets off running around the chairs as fast as he can, the other players holding on and running after him. When he has run around two or three times, he shouts out 'bang,' and immediately sits down on one of the chairs, leaving his followers to scramble to the other seats as they best can. Of course one must be left standing, there being one chair less than the number of players, and the player so left must pay a forfeit.

HATTIE HAVILAND.

To be Continued.

UNCLE TOM'S SCRAP BOOK.

Landlady (fiercely)—"You must not occupy that bed with your boots on!" Boarder—"O, never mind; there only an old pair. The bed-bugs can't hurt 'em. I'll risk it, anyhow."

STORY OF A TOMSTONE AGENT.

Gibbs is a tombstone agent. He finds it to his advantage to work upon the feelings in making a sale. The other day he happened to be in a strange section, and was sent to call upon a Mrs. Brown, who had lately lost her husband. He introduced himself and was invited to sit down; spoke of the weather, and then getting a round to business, said rather tenderly,—

"So you have lost your husband?" She wept and said that it had that resemblance. He said he sympathized with her in

her hour of affliction; that the best of friends were doomed to part, and but few knew any more whose turn would be next. He had not the honor of being acquainted with Mr. Brown, but he had heard him spoken of all over the country in the highest terms of praise (this was his usual style whether he had or not); everybody considered him an honorable man, and an affectionate husband, and they mourned his loss with the most tender affection, and he deserved a fitting memorial to his memory; and as it was the last sad rite that she could do, he begged her to look over some excellent monumental designs in Italian and American marble, which he was prepared to sell at the lowest terms. Said she—

"Looky here, mister, you said he was an honorable man and an affectionate husband, when you know you lie; he wasn't no such thing. It's true I've lost him, but he ain't dead; he ain't the kind that dies. He run off last Wednesday with another woman, and doesn't need a tombstone, I'm sorry to say; and I'd be much obliged to you if you'd light out, and not come back here until you have an occasion, mister."

He faded away from there, and stayed in that neighborhood two days, endeavoring to cultivate an acquaintance with the man who sent him there.

ACHIEVEMENTS FOR WAGERS.

(From Chambers' Journal.)

Some of the achievements depending on the incentive of wagers were in past times very odd; and journalists always looked out for such narratives in times when society had not yet begun to move on, literally and figuratively at railroad speed.

In the early part of the reign of George III two gentlemen made an eccentric wager at a coffee house near Temple Bar. One of them undertook to jump into water seven feet deep, with all his usual clothing, and undress completely. He did it, and if we picture to ourselves the twisting and wriggling involved in such an operation, floating the whole of the time, we must admit it to be as difficult an affair as it was ludicrous.

A butcher, on a calm summer's evening, undertook, for a wager, to cross the Thames in his wooden tray. In this exploit, using his hands as paddles, he made his passage safely from Somerset Stairs to the Surrey side, providing himself with a cork jacket in case of accident. The chronicler took care to record that "seventy boat loads of spectators were present; and bets to the aggregate amount of more than a 1000 guineas depended on the event."

A gentleman undertook, for a wager, that he would stand for a whole day on London Bridge, with a tray full of good sterling sovereigns, and would fail to find customers for them at a penny a piece. The report is that he won the wager, all the passers-by believing that he was merely trying to cheat them with brass imitations.

During a visit paid by one of the royal dukes to a victorious ship of war at Spithead, a sailor got on the very top of the mainmast (the truck), and stood there upon his head, waving his hat round and round on one foot. It is to be hoped that display of antipodean loyalty was duly appreciated.

Heidigger, Master of the Revels to George II., was considered to be the ugliest man in England. A wager was laid that a competitor for this doubtful honor could be found. An old woman from St. Giles' was brought forward, and the umpire, with Heidigger's own approval, was about to award the palm to her; but Heidigger, in response to a suggestion, put on the old woman's bonnet, to render the conditions more equal: the additional ugliness was so indescribable, that the victory was awarded to him.

Long before the days of steamboats, a gentleman wagered a thousand guineas that he would make a boat move twenty-five miles an hour. He accomplished it in a very singular way, and at a considerable outlay in money and ingenuity. He caused a circular canal to be dug, 100 feet in diameter and nine feet wide, and filled with water; a horizontal pole, equal in length to the radius of the circle, was pivoted at one end to a strong post in the middle, and fastened at the other end to a boat; a horse trotted in a smaller circle, at a point nearer to the post than to the boat, dragging the pole round; and the leverage thus singularly obtained sufficed to give a velocity of twenty-five miles an hour to the outer end of the pole, and consequently to the boat.

We have only space left to notice finally the wager concerning Sir John Throckmorton's suit of clothes, on which a thousand guineas depended. At five o'clock on a June morning in 1811, two Southdown sheep were shorn; the wool was washed, carded, slubbed, roved, spun and woven; the cloth was scoured, fulled, tented, raised, sheared, dyed, and dressed; and at 6:30 the same evening, the wool which had clad the sheep in the morning was worn as a dress suit by Sir John at his own dinner-table.

The Apiary.

SUCCESSFUL BEE-KEEPING IN A NUT-SHELL.

The great secret in successful bee-keeping consists in knowing how to keep all stocks strong, or having them strong, with brood in all stages, nursing bees and outside laborers at the commencement of honey harvest.

A commences in spring to stimulate, equalize, &c., and replaces all other queens, or queens that do not come up to the standard of fertility, with young, prolific queens, allowing but little increase—that is, provided surplus honey is the object.

On the other hand, B commences with the same number of stocks; in the spring lets them manage themselves, and on the first day of June they are not in condition to store surplus, or at least but very few of them, and those few he allows to swarm themselves to death, or what amounts to the same thing.

Now, you can readily see that B's stocks are expending all their force and energy to replenish numbers again, and by the time they are ready to commence storing, the harvest is past and B has any quantity of stocks he has to feed in order to carry them through the winter, or he has to double up stocks, &c., and when he comes to sum up the season's operations, he has received no surplus of honey; and his surplus stocks, or a large portion of them, have either to be fed or doubled up in order to winter them.

There may be seasons and localities where bees have to be fed in winter, but I never have seen such when they are properly taken care of in the summer.

CLOVER HAY FOR HORSES.

The New York Herald says: Many farmers are strenuously opposed to red clover as feed for horses of any kind, as they contend the poisonous dust which rises from the dead stalks and dry leaves frequently causes the heaves.

one half of the blossoms had turned brown, and the hay mostly cured in the cook in good weather so as to retain most of its leaves and heads, and green appearance, we have never known it to produce either cough or heaves.

IS SPRINGHALT HEREDITARY

The North British Agriculturist, in answer to a question being asked if springhalt is hereditary, states the case thus:

The precise condition on which springhalt consists are yet unknown. Frequently it is traceable to tumors about the brain; sometimes spicule of bone have, after death, been found pressing upon the great nerve going down the hinder extremity.

Although more common in the hind limbs, it occasionally affects one or both fore-legs. The nervous way some horses carry their heads, the trembling muscular twitching and other fantastic movements of their heads which are often excited whilst the bridle is being put on, appear to be manifestations of conditions very similar to springhalt.

The slightest cases of springhalt are readily enough made apparent by causing the animal to move backwards or to take a sharp turn, when from a few steps the natural symmetry of motion is disturbed, and the sudden catch up of the affected limb is particularly noticeable.

Breeders Directory.

Cards inserted in this list for one dollar a line per year if paid in advance; \$1.50 if in arrears

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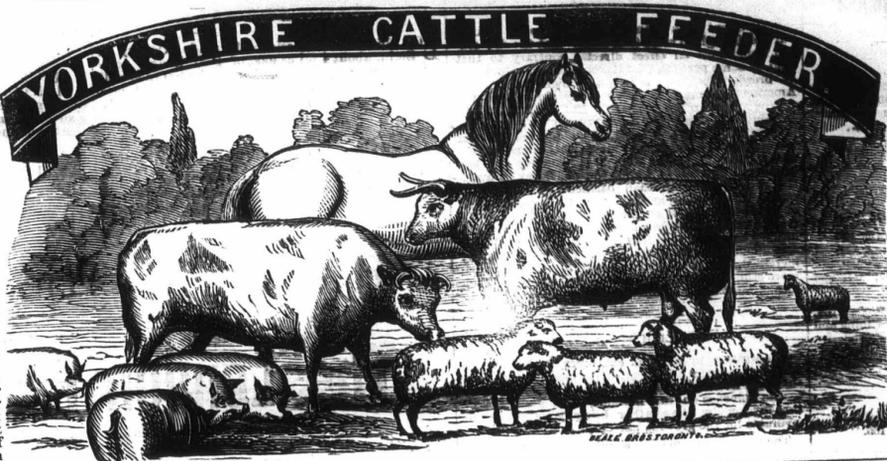
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Whole winter stock reduced. Now for the gains at the Striking Clock.

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The Markets.

The present state of the markets has so far verified our opinion, given some time since, that the dry season would have an effect directly contrary to that held by some persons, that it would cause a scarcity of bread-stuffs and consequent high prices. In America there may not be as many bushels to the acre as in some other seasons. But a dry season in Britain (such as is a dry season there) is never productive of scarcity. An English dry season, and above all, a dry autumn, is just what is needed in a moist climate. Even were it productive of a less number of quarters of wheat, the deficiency in quantity would be more than balanced by the superior quality of the grain, and consequently a greater yield of flour—and that of superior grade. The same is true of other grains as well as wheat; and the additional supply of food from the potato crop in a dry season must also be taken into account. The largely increased average of the grain crop in America, and more still, the immense supplies of grain from California, must be taken into consideration.

ENGLISH MARKETS.

The weather in England continues to be all that could be desired. They are enjoying the finest fall that they have had for years. And this fine weather has its influence on the markets, always affected in this season by the weather being favorable or unfavorable for the growing fall crops.

The market presents but slight changes: the grain market being generally weaker, and pork lower. In the American markets we have the same state of affairs. English quotations are unchanged—Flour, 24s. 6d; red wheat, 9s. 4d. to 9s. 6d; white, 10s. 3d. to 10s. 6d.; Barley, 3s. 6d.; Oats, 3s. 4d.; Bacon, 55s.; Cheese, 60s. to 65s.

MONTREAL MARKET.

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CHICAGO MARKET.

Flour dull, \$4.25 to \$5.60; Wheat, 87c. for cash; 87 1/2 to 88 for December; Corn, 74c.

NEW YORK MARKET.

Flour unchanged; Wheat, \$1.06 to \$1.21; Barley, dull and drooping; Corn, 96 for Western mixed; Oats, 60c. to 64c.

LONDON ONT., MARKET.

White wheat per 100 lbs., \$1.60 to \$1.65; Red do., \$1.50; Spring do., \$1.50 to \$1.65; Barley, \$1.80; Peas, \$1.20; Oats, \$1.10 to \$1.12; Butter, keg, 25c. to 30c.; crock, 27c. to 28c.; rolls, 30c. to 35c.; Cheese, dairy, 10c. to 11c.; factory, 11c. to 12c.; Live Hogs, \$5.50 to \$5.75; Clover Seed, \$10; Potatoes per bag, 75c. to \$1; Dressed Hogs, \$8.75 to \$7.

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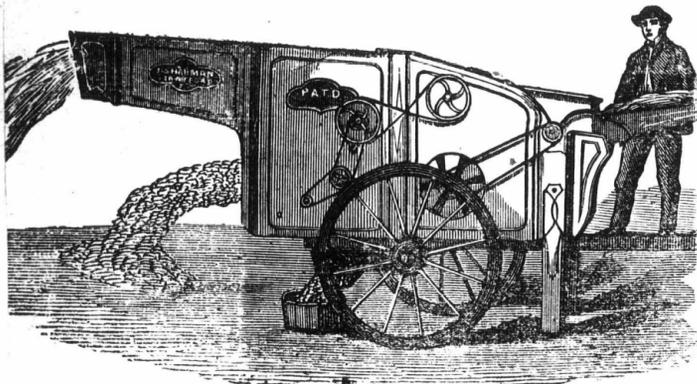
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