### Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below. L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

$\checkmark$	Coloured covers / Couverture de couleur	$\checkmark$	Coloured pages / Pages de couleur
	Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
	Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
	Cover title missing / Le titre de couverture manque		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
	Coloured maps /		Pages detached / Pages détachées
	Cartes géographiques en couleur		Showthrough / Transparence
	Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)		Quality of print varies / Qualité inégale de l'impression
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur Bound with other material /		Includes supplementary materials / Comprend du matériel supplémentaire
$\checkmark$	Relié avec d'autres documents		
	Only edition available / Seule édition disponible		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que
	Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.		certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

 $\checkmark$ 

Additional comments / Commentaires supplémentaires:

Continuous pagination.

## OFFICIAL SERIES.

# THE FARMERS' JOURNAL,

#### AND

Transactions of the Board of Agriculture

OF

# LOWER CANADA.

## **VOL** : XII. AUGUST, 1860. NO. 12.

1 122

#### CONTENTS.

(General.)

FARMERS' JOURNAL.—(Editorial Matter;) Application of the Sciences to Agricul-ture; Grazier and Breeder; Poultry Yard; Rural Architecture; Enquiries and Answers; Foreign Agricultural Intelligence, Obituary, and Critical Notices, &c. HORTICULTURAL JOURNAL.—(Editorial Matter;) Entomology, Meteorology; Ladies Department ; Markets. EMIGRATION

 All communications to be addressed—If for the French Journal, to J. PERRAULT, Eso., Secretary-Treasurer and Editor :—If for the English Journal, to JAMES ANDERSON, Eso., F. S. S. A., &c., &c., Editor, Board of Agriculture, Montreal.
 N. B.—Communications received before the 15th of each month will appear in the ensuing Number.

"Ol fortunatos nimium, sua si bona norint. Agricolos ! quibus ipsa, procul discordibus armis, Fundit humo facilem victum justissima tellus." VIRG. GEO.

### MONTREAL

PRINTED BY DEMONTIGNY & C° PROPRIETORS & PUBLISHERS

18. ST. GABRIEL STREET.

bsoription One Dollar per

## AUGUST. 1860.

#### CORRESPONDENTS.

WM. HUTTON, ESQ., Secretary to the Bureau of Agriculture, Toronto.

T. STERRY HUNT, ESQ., M.A.F.R.S., Chemist to the Geological Commission of Canada.

- C. SMALLWOOD, ESQ., M.D., LL.D., Prof. of Meteorology, M'Gill College, Montreal. JAMES WILLIAMSON, ESQ., A. M., L.L.D., Professor of Mathematics and Natural Phi
- losophy, Queen's College, Kingston. H. A. HOWE, ESQ., A.M., Emeritus, Prof. of Math. and Nat. Philesophy, McGill College. Montreal.

- Montreal.
  O. BUCKLAND, ESQ., Professor of Agriculture, University College, Toronto.
  ENRY YOULE HIND, ESQ., Professor of Chemistry, Trinity College, Toronto.
  U. F. KINGSTON, ESQ., M.A., Director of Magnetic Observatory, Toronto.
  REV. W. HINCKS, ESQ., F.L.S. &c., Professor of Nat. Hist., University College, Toronto.
  HENRY H. MILES, ESQ., A.M., Vice-Principal, Professor of Mathematics and Natural History, Bishop's College, Lennoxville.
  -POPE, Esq., of Eaton; DOAK, Esq., of Compton; W. L. FELTON, Esq., of Belvidere; J. CHURCH, Esq., of Huntingville, ARTEMAS STEVENS, Esq., of Ascot, &c., and the Sceretaries of the County Agricultural Societies.
- and the Secretaries of the County Agricultural Societies. EDWARD VAN CORTLANTD, Esq., M.D. Honorary Member of the Literary and Historical Society of Quebec, &c,

#### PUBLISHED UNDER THE DIRECTION OF JAMES ANDERSON, ESQ.,

-----0---

Government Drainage Commissioner for Scotland; Life Member of the Highland and Agricultural Society of Scotland; Late Commissioner Factor for the Right Honble. the Earl of Hopetoun; Author of "the Philosophy of Duty," "Letters on the Currency," and other Economical and Social Subjects; Series of First Class Prize Essays, "On the Ap-plication of the Sciences to Agriculture and the Arts," "The Alottment System," &c., &c.; Contributor to the Mark Lane Express, and English Farmers' Journal, &c., &c., &c.

#### CONTENTS.

#### Pages.

Pages.

FARMERS' JOURNAL.			0				
August-Postponement of the Provin-		New Potatoes, Strawberries, &c., from					
cial Agricultural Exhibition at Que-		Algeria	283				
becExhibition of Agricultural Im-	)	To transfer engravings to white paper	288				
plements and Produce in the Crystal		Honey Bees	284				
Palace, Montreal	265	The Cranberry-Proved facts as to cul-					
Conclusion of our annual volume		ture	284				
Crops in Europe-including France, the		Cheap paint	284				
United States and Canada	266	Sty on the Eyelid	284				
Remedy for Pleuro-Pneumonia	269	Quantity of pork from a bushel of corn	284				
How shall I become a Farmer ?	270	A Fly-proof wheat	288				
Hints on the Root Crops	271	Thread worms in horses	285				
Culture of Flax		Bloody Urine in cattle	285				
Surface manuring-Nature's Mode		The body avenged	285				
Remedy for short Pastures	275	Improving growth of Rhubarb	<b>28</b> 5				
Italian Bees-Valuable new species-		Dark rooms	285				
Herman's establishment in the Gri-		Manuring for flower beds	286				
sons	276	The Italian Bees.					
Tight Barns	278	Peaches in Pots					
Bouquets	279	An excellent cement.					
Womans employment changed	280	Pine lumber for the Holy Land	286				
Feeding cut hay to hogs	281	To prevent dogs from going mad	287				
Potato culture	281	Restoring damaged velvet	287				
Proper depth of planting corn	281	Dairy-Temperature of	287				
Qualities of potatoes	202	Solution for preserving timber	287				
Garden Cress	202	To test the quality of milk	287				
To keep tires tight on wheels	202	Parsnips for stock	287				
White clover in pastures	200	Rule for draining.	287				
· · · · · · · · · · · · · · · · · · ·		Fever and Ague districts.	287				
TRANSACTIONS OF THE BOARD OF AGRICULTURE OF LOWERSCANADA.							
Report of the Bureau of Agriculture and Statistics							

825

#### THE FARMERS' JOURNAL.

#### AUGUST.

Postponement of the Provincial Agricultural Exhibition at Quebec.—Exhibition of Agricultural Implements and Produce in the Crystal Palace, Montreal.

The weather has been very fine, and we expect an early and abundant harvest. Millers will probably be busy at work with the new crop by the 1st of August. In the Western Section, reaping has commenced. Wheat is ready for the sickle, and a continuance of dry weather will enable us to secure an abundant crop—though, as we anticipated formerly, the hay crop will be deficient. In the neighborhood of Chatham, C. W., and in other localities, harvesting has commenced, and the yield was never more abundant. In the Niagara District the midge has appeared, and the fall wheat—with the exception of the Mediterranean, will prove a failure. A dry season will generally be found more favourable to the farmer than a wet one—though either extreme is ever prejudicial.— We have presented our Readers with several extracts, regarding harvest prospects in Britain, France, the neighbouring States, and in our own country.

The following communication from Mr. Moore, Secretary-Treasurer of the City of Quebec Agricultural Society was received by the Board of Agriculture of Lower Canada.

QUEBEC, 7th July, 1860.

To J. PERRAULT, Esq., Secretary, Board of Agriculture, Montreal.

SIR,—I am directed to communicate to you the following resolution adopted at a meeting of the Directors of the City of Quebec Agricultural Society this day. It was moved by Louis Bilodeau, Esq., seconded by J. Ashworth, Esq., and unanimously resolved : That it is the opinion of the Directors of the City of

Quebec Agricultural Society, that the Provincial Agricultural Exhibition should be held in September, instead of August, as contemplated.

I have the honour to be,

Sir,

Your most obedient servant,

(Signed)

W. MOORE, Secretary-Treasurer,

The following resolution, extracted from the proceedings of the Local Committee of Quebec, of date of the 12th July last, and addressed to the Secretary, was thereafter duly received by the Board of Agriculture of Lower Canada.

Resolved unanimously :

That the Committee, considering the resolution of the Society of Agriculture of the City of Quebec, adopted the 7th July current, and the representations made to the Committee, is of opinion that the Provincial Agricultural Exhibition ought to be postponed till the end of September next—the great drought having so much retarded vegetation, and giving promise of a better Exhibition than that in the month of August : that this resolution be communicated to the Board of Agriculture of Lower Canada through Joseph De Blois, Vice-President, praying that it may be adopted.

Thereafter the Board of Agriculture received an Extract from the proceedings of the Local Committee of Quebec, of date the 18th of July following, in the following terms :

Proposed by Colonel Rhodes, seconded by Ls. Bilodeau, Esq.

That the Local Agricultural Committee of Quebec is of opinion that the Provincial Agricultural Exhibition of Lower Canada should not take place in the middle of August this year, seeing that an Exhibition at that period may probably turn out a failure in consequence of the great drought which has extended over several weeks, and which has considerably retarded vegetation and the progress of stock ; that, nevertheless, the Committee is not of opinion that the Exhibition should not take place, but only that it should be postponed till the end of September : and that this resolution should be transmitted to the Board of Agriculture, praying that the Exhibition be postponed as above stated,

In consequence of these several communications, the Board of Agriculture has resolved to postpone the Provincial Agricultural Exhibition of Quebec for the present; but the Exhibition of Implements and Produce will take place in the Crystal Palace, now in progress of erection in the City of Montreal; and it is expected the building will be advanced so far towards completion in a few days, as to be ready for the reception of all articles intended for Exhibition. We refer our Readers and Exhibitors generally to the advertisements in the Public Newspapers; and any further information may be obtained by enquiry, personally or by letter, addressed to the Secretary of the Board of Arts and Manufactures, Board Rooms, Mechanics Hall, Montreal, or to the Secretary of the Board of Agriculture, now resident in that city.

This present number will complete the volume for our Agricultural year-limited by the original contract. On this occasion our Readers will receive one number of the "Transactions." They will receive four numbers of the Transactions with the September number of the Journal, thus completing our original engagement with them for the two years.

#### THE CROPS IN EUROPE, INCLUDING FRANCE, THE UNITED-STATES AND CANADA.

English advices, by the last steamer, seem to forbode an unsatisfactory harvest, and unless matters are soon mended, high prices for all descriptions of our breadstufs will rule. The London *Times* says that the weather has been "of the same unfavourable character as previously reported. Incessant rain appaers to be the rule this year. When not raining the air is still damp, and the sky generally filled with heavy clouds. The sun can only rarely be seen. This extraordinary state of the weather exercises a most baneful influence upon vegetation. Not only are the cereal crops three or four weeks backward, compared with ordinary years, but the plants look so sickly and the ground is so saturated with moisture, that great apprehensions are entertained respecting the final result of the next harvest. The grass is now ready for mowing, but the rains are interfering and threaten to spoil the crop." At the Corn Exchange the reports from many of the best wheat growing countries were of a like nature. Up to the 2st instant there had scarcely been 24 consecutive hours of seasonable weather, and the unusual inclemency of the season in Ireland had a very depressing influence on trade. More than double the quantity of rain had fallen in June about Cork this year than last, and the month is said to have been the wettest and coldest since 1852. "It is plain," says the London Gardener's Chronicle, that a very late harvest must be looked for. The wheat is not yet generally in ear over the southern counties, and is everywhere declared to be three weeks or a fortnight later than it generally has been. And it is equally certain that whatever the weather of July may be, the harvest, when it comes, will not be nearly so good as that of last year, much as that fell below the average of the previous crop. No wonder then that, with unusually short stocks in the hands of the growers, prices in the corn market should everywhere be rising."

And the Mark Line Express, the leading agricultural journal of Europe, confirms the same views relative to the home harvest, while of continental crop prospects it remarks.

"Eor has the supply of foreign wheat been such this year as to afford much The importations up to the present time have fallen below those of last relief. year upwards of 1,000,000 qrs., the whole importations for the five months up to the Sistst of May being not more than 1,000,000 qrts.; and as the sales have been fully equal to the receipts, the stok has not increased. We are assured that the stook on hand in London does not exceed 100,000 grs., which is less than half that of any year at the same period since the harvest of 1854. We may except further supplies from the Baltic and Black Sea, but these will be at high rates. With deference to the latter, a report has jus been received from St. Petersburg that Southern Russia has been visited by an army of locusts and that in the provinces adjoining Odessa, a hundred square miles of country have ben devastated by them. If this report prove correct, it is impossible to say how far the mischif may still extend, but it will infallibly cause an advance in prices at Odessa, as well as lessen the exports thence another year.

"The accounts France, like those of the United Kingdom, are conflicting. In the eastern and southern departments and in Brittany, the wheat has sustained little injury from the weather, except as far as retarding ils growth. But in the central and northern departments the effects have been severely felt. Fine weather, however, would now, as with us, materially improve the crops, by favouring the blooming, and filling the ear. Prices had, nevertheless, risen in France, partly in consequence of the weather, but mainly, we believe, through the operation of the sliding-scale, which at present prohibits the importation. On the other land, the advance has raised the rates too high for exportation to The price of wheat in Paris last week ranged from 58s. to 68s. this country. per quarter, and of flour from 43s. to 45s. par 280 lbs; and on such terms it could not be exported to any port in England at a profit, or even without a loss. Il is not, therefore, likely, that we shall obtain any great quantity of wheat or flour thence, unless the prices here should rise, or those in France fall, so as to allow the exporter a profit."

THE MIDDE IN THE NIAGARA DISTRICT — The midge has destroyed any expectation entertained that the June frosts of last year had finished its career. Throughout the Niagara District it is as thick as ever, and the fall wheat, with the sole exception, we believe, of the kind known as the Mediterranean, is a general failure again. Experience has shown that this wheat is too early for the midge. Besides which, the huck adheres so tightly to the grain, and hardens so quickly, that the little insect finds it unmanageable. With this experience, farmers will doubtless go largely into seeding Mediterranean wheas next fall. – Niagara Mail.

Everything relating to the crops being now of general interest, we give the following items from our exchanges. Speaking of the crops in the London Districts the Free Press says :--

"We have before us samples of fall wheat taken from eleven different fields scattered over the country, on the road leading directly from London souch to the shore of Lake Erie, over a distance of twenty-six miles. Nearly every sample has the midge in the ear, but no great barm seems to have been done, except in one instance. The red midge is found lying perfectly dormant alongside the full plump berries, which have advanced too far to be affected by affected by the attacks of the insect. From the general appearence of the samples thus selected, it would appear that the fall wheat will be a full average crop damage done being not more than five per cent. In the one samble out of the eleven which is really bad, the straw is of a dark green color, thus showing that the seed has been put in badly, in ill-tilled soil, and consequently not sufficiently advanced to all kinds of wheat—soules, white chaff, old red chaff, bearded, &c.

From the Niagara District we learn that "the midge has destroyed any expectation entertained that the June frosts of last year had finished its career. Throughout the Niagara District it is as thick as ever, and the fall wheat, with the sole exception we believe of the kind known as the Mediterranean, is a general failure again."

An analysis of the state of the crops along the line of the Great-Western Railway, made up from information collected by the station-masters, is, on the whole, favorable. In several places the fall wheat has been more or less injured by the fly, but the spring crops are represented as being more or less promising. There has been no rust, and the fall wheat is now safe from that scourge.

THE CROPS IN FRANCE.—Paris, July 2.—The weather was cloudy and uncertain during the greater part of last week. Rain fell generally in the morning, but the after-noon was fine. The accounts received from the country announce that vegetation has made considerable progress, and that the wheat is shooting forth its ear in good condition. The farmers are more satisfied with the appearance of the wheat than they were a week ago. They are moreover unanimous in believing that the harvest will be a late one, which, under existing circumstances, is an advantage, as otherwise the corn would be ripened by a too hot sun, which would prevent the grain from filling properly. These accounts have produced a fall in the Paris market of 2f. the sack of 157 kilogrammes on bakers' flour, and of 4f. the sack on flour of the four marks. Wheat has likewise fallen in Paris from 1f to 1f. 50c. the sack of 120 kilogrammes The wheat harvest has commenced in Provence, and the farmers are satisfied with the result. The working of the obsolete sliding-scale is now becoming so unfavourable both to farmers and speculators that it is expected the Emperor will shortly publish a decree proclaiming free trade in corn. According to the present scale wheat may be exported from France by any port between Marseilles and Bordeaux on the payement of a duty of 25c. the hectolitre, but in every other part of France the prohibitive duty amounts to from 2f. to 8f. the hectolitre ; so that according to the existing system a French farmer could not export his wheat either to England or Belgium in case his produce was required in these countries.

#### THE FARMERS' JOURNAL.

#### REMEDY FOR PLEURO-PNEUMONIA.

A writer in the Philadelphia North American says :--

It happened that, on the same day on which I first saw the recent report from Massachusetts, I also received my supply of a medical journal from London, containing a narrative of several cases of the epidemic successfully treated by a surgeon in England, and the means which he found effectual as preventive. His report, after detailing the symptoms and medical treatment of two or three cases, concludes as follows :--"It would be superfluous to narrate every case, as there was a considerable similarity in all ; eight were cured, the rest had arsenic every night, and escaped the disease ; four died before I was called in." It does not appear that he lost more than one case, and that under circumstances unfavorable to recovery, while he succeeded, as he states, in preventing the outbreak of the disease in all the other cattle, which, it must be conceded, is a very satisfactory amount of success. The remedies employed in the treatment were aconite, bryonia alba, caustic and ammonia, phosphorus, sulphur and arsenic, and the latter was given also as a prophylactic. \*

The first medicines to be administrated in this disease are usually one or two drops of the tincture of aconite in alternation with same quantity of the tincture of bryonia alba also in water, at intervals of two or three hours. Or, if the pulse be not much accelerated and febrile heat not very prominent, caustic am monia in doses of two drops may be given in water. This remedy alone has cured many cases of the pneumonia of cattle. In other cases, the treatment has been successfully commenced with phosphorus and bryonia the former in doses of one drop of the tincture in a gill of water alternately with the latter, at intervals of two hours.

The remedy selected should be continued for twenty-four hours or more, if improvement continue to progress; but if in that time the symptoms should not be mitigated, or should remain stationary, it may be succeeded by others.— Thus, if the treatment be commenced with aconite in alternation with bryonia. or with caustic ammonia, let them be followed by phosphorus and bryonia, and then by sulphur in the same attenuated doses as those of arsenic. Other remedies, such as belladona, thus toxicodendron, cantharides, &c., are occasionnally indicated and advantageously employed in this disease; but it is not to be expected that the benefit capable of being derived from any remedy can be attained to its full extent, except in the hands of a practitioner.

It will be observed that a dose of arsenic was administered to the uninfected cows every night, and I would suggest that two or three drops of caustic ammonia should also be given, in about a wineglass full of water, every morning, for the same purpose. The cattle should be kept dry, and guarded against sudden changes in the weather from warm to cold, and particularly cold and damp weather. The strength of the animals should be kept up by a due amount of nutritious food, and exercise ad libitum allowed them through the day.

In the North American and United States Gazette of the 17th, I observe a communication from the Belgian Consul, recommending the inoculation of healthy animals with the virus of one dead with pleuro pneumonia, as a preventive, and which it is said almost invariably secured them from contagion. He cites the authority of a Dr. Williams (qu. Williem ?) who is said to have discovered this means of prevention. In a foreign medical journal, however, now before me, I remark that Dr. Luedersdorf, of Berlin, on exploring the Rhine provinces for the purposes of ascertaining the correctness of Dr. W's assertion, elicited the fol-

269

<sup>\*</sup> From the one-tenth to the one-thousandth of a grain of arsenue, prepared by trituration with sugar of milk, would be a sufficient dose.

lowing as some of the principal facts :—247 cattle were incoulated ; in 152 of them the local effect of the inoculation was manifested ; ten beasts died of the inoculation. Of all those inoculated, sixteen were afterwards affected with the natural disease. In none of those which took the disease had the inoculation produced any local effect. It should also be remarked, that the inoculation was always ineffectual in those which had previously had the disease.

#### HOW SHALL I BECOME A FARMER ?

-0-----

This question is frequently asked of us personally and by letter. The inquiters are of many different classes. Mechanics tired of confinement in close workshops, look to the green fields, and long for the freedom of the plowman.— Citizens who have accumulated enough for a moderate income, find themselves straitened by the expensiveness of city life, and see in the economy of rural habits a remedy for their perplexities. With bread from their own fields, butter from their own dairy, chickens from the poultry yard, and vegetables fresh from the garden, at only the cost of raising, they could afford to fare sumptuously every day, and as for the purple and fine linen, that need not be worn in the country. The school-boy too, who has spent the happy weeks of his summer vacation in frolicking over the hay field, scampering through the woods and feasting on bread and milk, is charmed with the idea of being a farmer, and enjoying the pleasures of the country the whole year round. From all these and many more, the question has come, "How shall I become a Farmer ?"

First. a word of caution is needed. Though country life is desirable, it is not all a round of pleasure ; though its gains are reasonably certain, they are yielded only to patient, continued hard work. The plowman sweating in the blazing sunshine, envies the mechanic in his shop; the economizing farmer sighs for the quick returns enjoyed by his fortunate city acquaintance, and the weary boy who follows the cart with his rake, would often gladly exchange his lot for that of the schoolboy who wants to be a farmer. Hundreds are every year deluded with mistaken notions of the pleasures and profits of farming - they do not count the cost. We fully believe that the benefits are worth the cost, but we are certain that of every ten who leave other avocations for farming, without some provious practical experience of the realities of farm life, nine will meet with discouraging disappointment. The multitude of places for sale at a sacrifice in the neighborhood of all our large cities, by men who have tried the experiment, is proof of the assertion. They met with unforseen obstacles-the business of cultivation of itself difficult enough, was rendered doubly so to them from want of experience. Crops were put in at wrong seasons and in the wrong manner ; the garden would yield weeds as well as flowers, and insects completed the destruction ; good help was not obtainable, and the dairy was a failure ; and at the end of the year, the accounts properly balanced, would read "Cr. by experience gained, many dollars out of pocket"-more or less according to the extent of the experiment. This too is in addition to the deprivation of many privileges which long habit had rendered necessary to enjoyment. Dark as this shading is, it need not have spoiled the final picture, had it been seen in time and calculated upon. A few years, and steady perseverance even under discouragement will bring all right, and he who would make the change proposed, should enter upon it expecting a period of hard times, then he will not be disappointed, and may go on courageously to final success. If you ran stand the "toughening" process, you can become a farmer, if not-and it will be severe - don't attempt it.

But we will suppose all this has been settled, and a young man knowing little

or nothing of farming, has fully determined to go through thick and thin, and make soil culture his profession ; how shall he best accomplish it ? He needs first practical knowledge of the use of farming implements, and this he can gain by engaging to work as a "green hand" with some intelligent farmer, upon whom he can rely for kind treatment and judicious oversight. The first season, he must be content with apprentice's wages, satisfied if he may receive enough to board and clothe him decently. Let him learn to handie the plow, the hoe, the seythe, and make a business of "getting the hang" of every tool used in While doing this, day by day, let him keep his eyes and ears open to farming. all that concerns the various operations, and not be ashamed to ask even the simplest necessary questions. Occasional leisure moments will be well occupied in studying agricultural periodicals and books. At the year's end he will, if attentive, know wheat from barley, be able to plant and hoe corn, and dig potatoes, to cut a ragged furrow with the plow, and perhaps a raggeder swath with the scythe, in short, will have made a beginning; and if careful, will find his muscles better able to perform the increased labor of the following years. Having in one or more years as may be necessary, thus learned the first steps, let him begin to walk alone, by undertaking something of his own account; it would be well to hire a small field, and arrange for time to work it. Let him advise with others, and then decide for himself, as to the best crop and manner of cultivating, and expect but a small return, and be will, when the crop is harvested, have learned more of management, than years of merely working for another would have taught him. His progress after this will be easy, if he have studied as well as worked. He may soon, with little aid from others, conduct a farm successfully, working it on shares, or hiring at a stipulated price, and by skill and economy begin to accumulate capital for the purchase of a few acres as a nucleus of his future form. This is but a mere outline, but sufficient to indicate what may be done by a young man in earnest to become a farmer - with ordinary intelligence he can arrange the details, without it he need not try the experiment. We have not space to pursue the subject further, and illustrate how a man engaged in other business, and having a family, may secure home in the country which shall give him a livelihood, but may recur to the subject on another occasion.

# HINTS ON THE ROOT CROPS.

We have just fed out the last of our carrots, and the only fault we have to find with them, is, that they are gone. The quadrupeds that have fed upon them, from the horse in the stable to the pig in the sty, coincide in this lamentation. We are sorry that we had not raised two tuns more, both because our neighbors want to purchase, and we want more to finish out the season. We have fed ruta bagas, carrots, sugar beets, and mangel wurtzels and like them all so well, that we shall plant more of them all than we have ever raised before. Each of these roots has its peculiar advantages, and every farmer who has the usual variety of stock upon his farm, should raise them all. All domestic animals crave a variety of food, and will thrive much better upon a half dozen different kinds, than upon any one. They not only cat a larger quantity of food, but it is more perfectly assimilated, and the farmer gets a better return for his fodder, in the growth of his animals, or in beef, milk, or butter.

We have never found any thing to bring out horses and cows in so good condition in the Spring, as a diet partially of roots. They are particularly valuable in the three Spring months, before cattle are turned out in grass. They are full of juice, and are highly relished with the dry hay and meal to which cattle are often confined at this season. They keep the bowels loose, and the appetite in uniform good condition. We have never had the slightest case of illness among animals fed on moths.

The carrot is the best of roots for horses; fed a peck a day with other food, they aid digestion, and keep them in good flesh. We think a diet of hay, oats, and carrots, half en half of the last two, is the best food we have ever tried for horses. They work as well as when fed with hay and oats Carrots are also admirable for milch cows and for young stock. They increase the richness of the milk, without adding any unpleasant flavor. This objection is brought against a diet of turnips, and for this reason they should be fed to other animals—oxen, fatlings, and young cattle. The sugar beet is more nutritious than the ruta baga or the mangel wurtzel, but does not yield so large crops. The mangel gives the largest crops to the acre, sometimes reaching forty tuns. Its keeping qualities are excellent, and it should come in for feeding in the Spring months.

These roots economize land, and should receive a large share of attention from those farmers who live in the suburbs of cities and villages, where land is dear. The yield will vary from five hundred to two thousand bushels to the acre, according to the quality of the soil, and the amount of manure and labor expended upon it. With extraordinary treatment, much larger crops than these are sometimes realized. The land that produces three tuns of hay to the acre, may be made to yield twenty five tuns of carrots, which would have five or six times the nutritive value of the hay. In no way can a farmer get so much valuable fodder upon a given piece of land, as by root culture.

The bearing of these corps upon the compost heap, is a very important advantage. The mature voided by an animal fed on roots, is enormous in quantity, and of very good quality, though not equal to that made by feeding grain and oil-meal. If properly cared for, and mixed with much under cover, it will take but one season to make a farmer a warm advocate of root crops.

The strongest objection brought against the cultivation of these roots, is the fact that farmers have never tried them. The labor of cultivating, harvesting, and storing, is generally over-estimated, and the stereotyped farmer keeps on with his hay and grain. We greatly desire the class of our readers who own small farms, and want to make the most of them, to try roots, even if it be no more than a quarter of an acre. The great thing is to make a beginning, and to see with one's own eyes the enormous quantities of food the soil will yield in roots. Prepare the ground thoroughly, and manure as heavily as for the largest corn crop.

In all latitudes north of this, the first of this month is not too late for sowing the seed. We have for years sown a portion of our carrot seed in June, and got fine crops. The turnips may be sown still later. The beets should not be delayed. Try roots.

# CULTURE OF FLAX.

• Our correspondent from Orleans County, Vermont, asks us the following questions, to which we respond with pleasure.

Can flax be made a profitable crop as far north as forty-five degrees ? What is the best time for sowing the seed ? What soil is best for its growth ? The best manner of preparing the ground ? Other directions for gathering and whipping the seed, and preparing the straw for mill, &c.

The general neglect to cultivate flax in New England, would seem to be pretty good evidence that other crops are more profitable. This crop can be grown, however, in perfection, we think, in any of the New England States. It requires a strong granite or clay loam, which should be prepared as for corn, though we have never known flax put upon sward land. On drained land, the roots of this plant will strike very deep, so as to withstand pretty severe drought. Sow as soon after the first of May as the ground is warm and in proper condition. The old mode of gathering was by pulling it by hand-a process which farmers very much dislike. It is left upon the ground until wilted a little, and then tied in small bundles, and stooked in the field. If the weather is favorable, it will be fit to take to the barn in a few days. After remaining in an airy position there for some weeks, the seed is easily thrashed or beaten from the bolls, and then it is taken to a mowing field, and spread thinly upon the grass to go through a rotting process : this requires from ten to twenty-five days, depending much upon the state of the weather. When it has remained so long as to render the pulp, or stem part weak and brittle, it is gathered into large bundles, and stored in the barn. In the sunny days of the last of February and during March, the barn floors of New England were once the scenes of a busy activity in preparing flax for the distaff. It is first passed through the "brake," an instrument having four or five long wooden jaws below, and another set above. The flax is placed on the lower set, and the upper ones brought down upon it, breaking the stem into pieces, which fall out, leaving the long fibre in the hand. When this is done, it is passed to the "swingling board," and struck with a long wooden knife very smoothly polished. The "swingler" occasionnally passes it through a " hatchel," which is a group of long, sharply-pointed irou pins ; this straightens the fibre, and at the same time takes away some of the fine pieces of the broken stem. In this manner the fibre is reduced to a glossy, delicate appearance, has a very soft and silky touch, and is now ready for the wheel.

A new process has been discovered of "rotting" or "bleaching" flax, so that it is accomplished at a cheap rate in a few hours, and the fibre made ready to be mixed with wool or cotton, and spun very much as cotton is. It is quite probable that this discovery may introduce the culture of flax among us again.

#### SURFACE MANURING—NATURE'S MODE.

Not only with satisfaction, but with gratification, I perceive gentlemen take some exceptions to my views on surface manuring; for if what I may advance be found incorrect, either as to its facts or inferences, certainly I, as a farmer, can have no rational objection to see the reason why fairly made evident. Proeeed to examine and discuss them, gentlemen, and you shall have no more attentive reader than myself; but, let me ask you, be careful not to misapprehend or misinterpret nature, who at once supplies us with facts, philosophy and example; and to imitate whom - the American Agriculturist to the contrary notwithstanding - constitutes, as to principles, the highest art which cultivators can achieve.

We have in natural marsh and swamp (briefly noticed in a former article,) notable examples of nature's mode of manuring. In marsh land (of which 100 acres of my farm is composed,) vegetable matter has for ages accumulated and formed deep beds, with but little admixture, in most instances, of mineral ingredients. These deposites bear immense growths of coarse grass, which being left on the ground, become to a large extent the *special* manure or identical substance, from which succeeding creps make their growth, with a small addition from the soil itself. Whether these mucky soils be ten feet or only ten inches in depth, makes little difference in the growth of their grass crop, for all the matter incorporated in its growth is supplied at and near to the surface, and more than enough of vegetable matter is available there usually, which precludes the necessity of the plant drawing subsistance from lower depths. But if the grass really requires nutrition from any considerable depth, it would derive none, because generally saturation with water is so complete that air gets no access ; no mold can therefore be prepared, nor any nutrient elements rise up with heated vapor to feed or nourish the growing grass above. And the same causes prevent the roots from penetrating far below the surface ; which in fact it is unnecessary for them to do, so long as previous crops remain on the ground, affording the identical elements of the crop for decombination and reorganization. The depth or quantity of matter in such states and situations, is then of no advantage till after it has been exposed to atmospheric disintegration and solution ; I say solution, for *heat*, the prime agent of this process, is derived directly from the air --which are not likely to take place till *after* the soil has been subjected to the exhaustive process of culture and cropping.

In the instances of swamp. (of which I have owned some fine tracts.) the roots of trees do not penetrate to so great depths as on uplands with a non-saturated subsoil, both because of the too cold temperature below, and the ample nutritive matter abounding at or near the surface. Rather the roots of swamp timber *spread* out, forming radii of large circles, and no better proof of this is needed, than the obviously *large proportion* of swamp timber that is uprooted by severe gales and hurricanes, as compared with smaller destruction on uplands from the same causes, and where the roots do penetrate much deeper, perhaps twice as deep.

Admitting that a variable proportion of matter arising from the decay of vegetable growth, is caught and passes off in prevailing currents, there is generally as much supplied as carried away by this agency. And the same currents that cool the air diminish equally the absorption and ascent of organic particles, and consequently the rate of growth in trees or crops, according to the state of the weather. The bulk of natural grass is reduced much by annual mowings, which lead to the necessity of seeding with more valuable but less bulky cultivated grass : the reduction in bulk and weight being due to the absence of the substance of previous growth, as a natural manure of the plant, which must derive its growth therefore from a reduced supply of convertible elements. Instead of assorted matter on the surface ready for decombination and immediate or simultaneous reorganization, the process of atmospheric disintegration and solution, which results chiefly from the same natural process as growth itself.

By inspecting the rings which mark the yearly growth of trees, we discover unmistakeable evidence of different degrees of growth in different years, and we all know the differences which result to our ordinary grain crops, from more or less favorable seasons of growth in successive seasons. Can any one doubt, then, that the best seasons for farm crops are also the best for growing trees ? or that the latter make the most growth in the best growing weather.

Or is it to be wondered at that the leaves of one year are not all decayed by the next, though a year later more than a year's product of leaves may decay, and trees make more than an annual average growth. The yearly growth may vary, but it will not much exceed the supply of decaying vegetable matter on the ground. And it remains a fact that the leaves of forests and swamps are decomposed and reabsorbed, and organized annually according to the weather and rate of growth in trees. In some seasons decay and growth will be below. in others will exceed the annual average. But the fact and principle will remain, that they specially manure themselves from the products of previous growth, and alway supply, or derive their supply of organic and mineral matter from on or near the surface, always within easy access of common air; and senatural manuring proceeds, and affords unerring examples.

It has been stated that loss will arise from surface manuring by the escape of carbonate of ammonia. I have not this statement at hand, but if I remember correctly, Dr. Voelcker showed by experiment some five or six years since, that no material loss of ammonia takes place from the exposure of manure on the surface of the ground, except in warm growing weather, because the escape of this gas is due to fermentation, which spreading the manure in the cool air prevents. Carbonate of ammonia being a compound derived from the union of two gasses, I should infer that it does not escape, and is not lost. except from the same causes that promote the escape or liberation of ammonia-which is its base or governing ingredient-from exposed or spread farm-yard manure, namely, heat and humidity sufficient to promote either fermentation or growth, and which is to the latter indispensable in supplying its gaseous ingredients. If this view be correct, the liberation and ascent of carbonate of ammonia takes place at precisely the juncture when the plants need it for growth. If it can be shown that plants do not absorb this compound, I have no objections to offer ; but I perceive no reason why they should not absorb and assimilate compounds as readily as simple elements, provided the form and size of the particles be not unsuitable. As to mineral elements, natural causes will prepare them fast enough usually, for ordinary useful farm crops. Tobacco is not one of these, therefore lands exhausted by its culture are an exception to this truth as a general fact. It is seldom safe to use *universal* terms if we desire to be correct, and who will doubt that generally accuracy is always desirable.

If Socrates were still in the flesky tabernacle, he would most likely reflect on the facts, that for a century or more light soils have been pastured with sheep, and otherwise, to renovate them by surface manuring; that for many years excellent results have accrued from surface manuring grass lands in the fall; that the unrivalled benefits of irrigation in Italy, Scotland, England and elsewhere, result from surface manuring; that a large area of the heavy soils of England are surface manuring; that a large area of the heavy soils of England also; and that vast areas of the light rolls of England have been made, highly productive and profitable by that most remarkable evidence of the value of surface manuring which is seen in the consumption on the ground of the immense bulk of turnips annually produced there, and the redistribution of which on the surface of their fields, has increased their product and value beyond all precedent, or even the anticipation of the most hopeful.

#### REMEDY FOR SHORT PASTURES.

Those who have but a limited range of pasture and keep stock enough to crop it well, are almost at the mercy of the weather. If there chance to be favoring rains, and a good season for the growth of grass and clover, all is well; but if, as frequently occurs, there comes a long period of drough, the browned fields already closely cropped, suffer severely, having little to protect the roots from the full power of the sun, and the cattle suffer yet more. The milk pails show a considerable diminution, the dairying profits shrink, and the stock fall off when they should be gaining. A severe check of this kind will be felt too throughout the season, and much of the pasture may be "Summer killed," and the full flow of milk can hardly be regained. This may be guarded against by putting in a small plot of corn, sorghum, millet or other suitable crop for cutting and feeding green. An acre of corn sown broadcast now, will very soon yield sufficient to give great relief to the short pasture. It is not necessary to stable the cows; out a good supply for them, and feed night and morning before they leave the yard; they will eat it with a relish, and make ample returns in the milk pans and the churn. Even if the threatened drougth should not come, and abundance of grass should grow, the soiling crop need not be lost. Cut at the proper season, and properly cured, it will not come amiss next Winter.

#### ITALIAN BEES.

In accordance with my instructions from the Patent Office, I arrived in the country of the Italian Lakes in April, 1859, and commenced searching for Italian bees.

I wandered about among the hills of this delightful region and examined many hives, but could not feel satisfied that any one of them were of the pure Ligurian stock. The Italians are not a careful people, and it is difficult to find among them sufficient knowledge or skill to keep pure any kind of stock. The approach of hostile armies stopped my further researches for the time, and I was obliged to wait until the conclusion of peace for further efforts.

In the following September, as I was about leaving my Swiss home for another trip into Italy, I learned that an intelligent Bavarian, named Hermann, had established himself in the Grisons, and had devoted himself with much enthusias in to the culture of pure Italian bees, which he collected wherever he could find them, but mostly from the vattelin.

I visited him at once, examined his hives, and was convinced that they were pure. I purchased of him for the Department to the full amount I was authorized to expend and ordered them to be sent by the Arago on the 18th of October from Havre. By some unaccountable delay they were not shipped until December 25th, from Genoa. They are, doubtless, now on their way, and will, on their arrival in New York, be forwarded at once to Washington. I sent by the same vessel a few hives for my own use, and in order to insure the thorough introduction of this breed, I have purchased one hundred additional hives for myself, which will be shipped next month, and from which, during the ensuing summer. I shall be able to supply many who desire them.

Since I last communicated with the Department, I have had additional intercourse with European Agriculturists, and am increasingly impressed with the great value of the species. It was not introduced into Northern Europe until 1853, and its introduction is every pear more appreciated as a new era in bee culture. Its introduction in the United States may no less constitute a new era, and the Patent Office will deserve the gratitude of the country for its efforts to obtain it. This will be the better understood when the profits of bee culture shall be so generally appreciated that every farmer will have his hundred hives, the inmates of which will gather up the multitude of sweets which now are lost, and yield to their owner, according to his care, from three to ten thousand pounds of honey, or, according to Longstroth's lower estimate, five hundred dollars per annum profit. It cannot be doubted that the Italian bees will entirely take the place of our common species. for the reasons :

1. That they will endure the cold better.

2. That they swarm twice as often.

3. That their queens are abundantly more prolific.

4. That the working bees begin to forage earlier and are more industrious:

5. That they are less apt to sting, and may be easily tamed by kind treatment. 6. That the queen may be so educated as to lay her eggs in any hive in which she is placed, while the bees of such a hive, deprived of their own queen, will readily receive her.

7. That its probose is longer, and it can reach the depths of flowers which are entirely beyond the efforts of the common bee. The importance of this last superiority cannot be too highly appreciated.

8. That a young queen, once impregnated, will continue fertile during her life—from four to seven years. This quality will insure pure broods, till the whole country is filled with them.

9. That they are far more brave and active than the common bee ; will fight with great fierceness, and more effectually keep the moth out of the hive.

They can be easily distinguished by a broad yellow band around the abdomen.

I feel assured of their susceptibility to entire domestication, for I went in among them without any protection, unless a cigar could be considered such. My companion uncovered the hives and took out the bees, which swarmed around me in great numbers, but did no harm, except one, whom I treated rather roughly when he alighted on my finger.

It is the custom of the Italians to take them up on the highest Alps, and I therefore feel certain of their great hardiness.

I believe that this bee will soon prevail in the United States and drive all others out of culture. This will result from a conviction everywhere of the large profits to be derived from its propagation and its labor. To import a hive of full size from Europe will cost from twenty to twenty-five dollars.

It may be, therefore, safely assumed that, for a couple of years to come, the demand for these bees will be very great, at ten dollars for a queen impregnated which will produce thirty thousand workers and at least fifty queens in one season. For, perhaps, three years more, their value will be five dollars, and less, until the country is fully stocked with them.

As soon as the demand fails, the possessor is thrown back upon their labor for his profit. Their labor will be more productive than that of the common bee, and Longstroth gives the produce of the latter from thirty to a hundred pounds of honey for each hive, besides the wax. His lowest estimate is set down at five dollars profit per hive.

A German writer says that from one Italian queen he obtained more than one hundred and thirty fertile young queens, but I state fifty as a safer number. The great value of this breed is the safety and ease with which they can be handled and divided  $u_{\rm P}$ . When it is recollected that each hive will make fifty others in the first year, and, consequently, twenty-five hundred others the second year, and then, when the demand fails, each colony or hive will produce honey to the value of five dollars, it will be readily conceded that its money power will speedily settle the question of its general introduction.

It must not be forgotten, however, that success in this, as in all high breeding, requires care and attention, and for want of this some may be disappointed in their results. The facts I have stated are asserted by the best agriculturists in Europe, and may be considered reliable.

With regard to some other points in the description of Italian bees, I find my notes confirm entirely the remarks and letters given in Longstroth's valuable book, and 1 will, therefore, not repeat what you can read better there.

Every one interested in bees should not fail to buy this book and read it. In no other can we find so much valuable information, of learn so well what veritable slaves of the lamp these little insects are, giving to their master threequarters of their earnings, and demanding in return no food and but little more attention than a woman or intelligent child can give.

To this book I must also refer you for the best mode of introducing Italian

queens to our native stock, or dividing up the whole Italian colonies. I cannot perceive that the German or Italian mode differs materially from it.

Trusting that the bees will reach you in safety, I remain,

Very respectfully,

S. B. PARSONS.

William M. Bishop, Commissioner of Patents.

#### TIGHT BARNS.

Public attention is now turned to the subject of tight barns for stock and hay.

The Committee of the Legislature, and other gentlemen, have recently visited the tight and very costly barn of Mr. Chenery at Belmont. This was the pride of the new town till Mr. C. learned that very tight barns, with ventilators *closed* during the night, were not exactly the thing to cure cattle, which have the lung disease.

Mr. C. intended no wrong when he permitted his stock to be shut up so close after he discovered that his cows were diseased. We doubt not that he intended to do great service to the public by importing his Dutch cows -- but he ought to have known that a very close barn was not exactly the place wherein to confine animals with a disease of the lungs !

Farmers will see that neat stock may be confined too close for health. All breathing animals must have air to breathe. And though a popular string to pull is that which ridicules the practice of letting young cattle lie under open sheds in preference to being tied by the neck in a close stable; still experience shows us that stock of all kinds suffers more for want of air than from an excess of it.

The discase now alarming us is a disease of the *lungs*. Tight barns are not the proper remedy. The Committee which visited Mr. Chenery's cattle last week found that about half the number were still living and eating, though all had been exposed and had mix'd with the diseased cattle now dead. It seems that Mr. C. has a very fine yoke of oxen which have been kept with his diseased stock—and though suspicions are entertained that they may yet die of this malignant disorder, he still keeps them at work, and they may yet be made 'whole by proper treatment. If they could stand the shock for six months, why may they not for twelve. Hard work and free air will be better for them than a tight barn.

Many cattle have suffered for want of shelter and warmth, and more will suffer for want of air and exercise. Tell us no more of your soiling system where cattle are fed in tight barns, and are not suffered to make use of their limbs. A fresh stock of cattle may endure the confinement for a year or two, and may give more milk under the squeezing system. But neat stock and sheep must have *free air*, or they will soon generate disease of some kind. And as the lungs of animals depend on free air, Farmers who are dependent for their living on health and healthy cattle should be on their guard in respect to the theory that farms need no fences if ewners will confine their cattle in barns and yards.

All cattle require exercise as well as air. And Farmers very generally think so; otherwise a large number of them might adopt the soiling system and feed their cattle in racks. This is directly contrary to nature. It is an artificial system which has not half so many arguments in its favor as a good Farmer can produce against it.

We are told of the great cost of fencing – and of the loss of manure in pastures. But the manure is not lost. The better part is at once absorbed in the soil, and though it gives no feed this year it makes its mark for the next. The solid portion may not give so good an account of itself as the liquid—but who can say that this is lost when we find the rankest grass where it was dropped ?

Cost of fencing.—The cost of fencing a new farm is considerable. Yet such a farm has timber and rocks in abundance in most locations, and when the outside is enclosed the division fences are often made without any cost whateversince there are rocks which must be removed after digging, and they may as well be hauled off for a wall as to be placed in a great pile, as some Farmers do.

When rocks are plenty the cost of throwing up a wall four feet high is not great - and most farms have been fenced in this way at very little cost.

Barns have been built at great expense. Many people suppose that the tighter the walls the more secure will be the stock and hay. But this is not so. Cattle tied in stalls are obliged to lie in their own filth through the night. How barbarous then to shut the doors and windows close, and make them snuff the same air which has already passed through their own lungs several times during the night, and lost all its virtue as a respirator.

Tight barns for hay.—No practical and observing farmer will say that his hay is kept better or sweeter in a tight barn than in one which admits some air between the boards.

Hay will prove musty in very tight barns unless it has been so much dried as to injure it. In common barns hay that has had two day's drying will keep well though put in a large mow provided that the air may come in at the sides.

They are not experienced farmers who double board their barns, or put on elap boards to make them air tight.

#### BOUQUETS.

This is a theme on which writers have been very sparing of instruction, and probably for the reason that taste varies so much that it is difficult to write to suit all readers, or even a majority of them ; yet it is a theme of considerable importance. True style and taste ought to be cultivated, and as yet we have no standard by which to judge, but I would not wish to bring the public to my standard in a matter of taste, unless it be correct. I now introduce the subject in hopes of having experienced persons express their opinions through your valuable paper.

To form a good bouquet for the hand or parlor, is like painting a good landscape, or in a lady to dress herself with judgment and taste, and requires experience and a fine appreciation in blending colors, and an artistic hand to form them into proper shape. First, it is necessary to have good flowers, and for a hand bouquet they ought to be fine, for no large or coarse flower is here admis-Next, have as many of them fragrant as convenient ; then a full supply sible. of green-many of the ornamental grasses, and geranium leaves of the rose scented on some of the delicate growing varieties, are good-then form them compactly, either in pyramidal or somi-pyramidal shape, and not over largo--have each flower so as to show distinctly its beauty, and so blended, as to color, as not to offend the eye of taste. Some prefer the loose or flowing style ; but I do not ; this style is better adapted to mantle-vase bouquets and large table bouquets, where large flowers are admissible. I would as soon expect to see a gentlemen or lady without previous instruction or practice, take the pencil and draw a beautiful landscape at the first effort, as a person to form a good bouquet the first time he or she has tried it. Any lady may put on her dress, and many artists succeed in producing a sort of a picture, but how few of either really succeed in dressing becomingly or painting a picture of merit-so with bouquet making.

At the State Fair at Elmira, one of the lady committee on flowers enquired of one of the exhibitors to point out the bouquets, for really she could not tell what was meant for them. I have myself served on committees of flowers, and should not have suspected that the flowers exhibited were intended for bouquets had they not been labelled and entered as such-and if such be the want of information, either with the committee or exhibitor, it is high time information was obtained. I recollect an incident that occurred at an exhibition of the Albany and Rensselaer County Horticultural Society. Two of the most eminent professional florists exhibited hand bouquets. They were formed artistically, and beautifully arranged from the choicest flowers of the green house. One, however, had a Lavetera on the apex, and this was the only coarse flower in it ; of course this mistake decided the question ; but the unsuccessful florist felt that injustice had been done him, and made his complaint to me. I pointed out the defect to him. About eighteen months afterwards he called my attention to the circumstance, and said it (our decision in that matter) had been worth to him more than a hundred dollar premium, for, said he, "I have never made that mistake since." I do not feel inclined to discourage the effort to form nature's most beautiful productions, but I do advise all to study and practice, and in a short time most ladies will be able to accomplish a combination that will be pleasing to themselves and their friends ; very few gentleman will be able to accomplish it, but the innate appreciation of the beautiful by ladies make them apt scholars.

There is a style that I have seen in New-York city of forming bouquets, and especially basket bouquets, of having a single variety and colored flower to extend around the bouquet, and then another, and so on ; when I see one of these I can think of nothing else but a barber's pole ; another method is to work in the flowers as closely as possible, without any relief which the green foliage gives, and then stiff old bachelors and old maids fill my mind, and yet those have usually been awarded the first prizes at Agricultural and Horticultural Shows ! I believe I have said enough this time, and should it bring forth the forists to express their opinions, as diversified as they may be, my object will be accomplished.

# WOMAN'S EMPLOYMENT CHANGED,

Within the course of the last few years, two immense events have changed the lot of European women. Woman has only two grand trades to follow, spinning and sowing. The others, (embroidery, flower-making, &e., are hardly worth reckoning. Woman is a spinster, woman is a seamstress. That is her work in all ages : that is her universal history. Well, such is no longer the case : a change has lately taken place. Firstly, flax-spinning by machinery has suppressed the spinster. It is not her wages only, that she has thereby lost, but a whole world of habitudes. The peasant woman used to spin, as she attended to her children and her cookery. She spun at winter evening meetings. She spun as she walked, grazing her cow or her sheep. The seamstress was the workwoman of towns. She worked at home, either continually, or alternating her work with domestic duties. For any important undertaking, this state of things has ceased to exist. In the first place, prisons and convents offered a terrible competition with the isolated workwoman ; and now, the sewing machine annihilates her. The increasing employment of these two machines, the

#### THE FARMERS' JOURNAL.

cheapness and perfection of their work, will force their products into every market, in spite of every obstacle. There is nothing to be said against the machines, nothing to be done. These grand inventions are, in the end, and in the totality of their effects, a benefit to the human race. But these effects are eruel during the moments of transition.—Dicken's "All the Year Round."

FEBUNG CUT HAY TO HOGS.—Messrs. Editors—On the 24th of last Sept. I bought two pigs, four weeks old. They were kept on skim-milk until about the 1st of Jan., when the quantity of milk falling short, 1 commenced feeding cut hay—clover and timothy—and have continued to do so until the present time (April 9th). I never wintered hogs so easy and cheap. They have grown finely, and are thrifty handsome fellows.

The mode of feeding is this :--In the morning, after feeding, about four quarts of hay, cut fine, is put into the pail, together with a pint of barleymeal, then boiling water sufficient to wet and seald it, when well stirred up. After standing a while, the pail is filled with milk and dish-water-this is fed to them at noon, at which time the same dish is prepared for them at night, and then, another for the morning. Scalding the hay in this way, makes it tender and sweet, and is readily caten.

I think this a very economical way of wintering hogs. At any rate, I never had them do better than on this feed. Jefferson Co., N. Y. J. L. R.

POTATO CULTURE.—On page 171 of the Co. Gent., under "Potato Culture," John A. Robinson has made some very interesting experiments on the one-eye aystem. On "figuring it out," (with hills three feet apart,) I find it gives the following result :

No. 1.	One eye p	er hill gave	181 bushe	els per aere.	
No. 2.	Two	do	230	do	
No. 3.	Three	do	254	do	
No. 4.	Four	do	242	do	
No. 5.	One piece	with 2 to 4	eyes, 250	bushels per	acre.

or about the same as the average of Nos. 2, 3, and 4, they being 245. He says : "There may be cases where this plan might be adopted with profit, but for general cultivation it is entirely worthless." Now as he don't regard 245 or 250 bushels a good yield, I would like to have him inform me through your paper, what he does, or can produce per acre, and what course he pursues ?

Proper DENTH OF PLANTING CORN.—At a recent meeting of a Farmer's Club in Illinois, Mr. Waterbury read the following table, from the old *Prairie Far*mer, showing the time at which corn came up when planted at different depths, from one to six inches :

No. 1—1-inch corn came up in  $8\frac{1}{2}$  days. 2—1 $\frac{1}{2}$ -inch corn came up in  $9\frac{1}{2}$  days. 3—2-inch corn came up in 10 days. 4—2 $\frac{1}{2}$ -inch corn came up in 11 $\frac{1}{2}$  days. 5—3-inch corn came up in 12 days. 6—3 $\frac{1}{2}$ -inch corn came up in 13 days. 7—4-inch corn came up in 12 $\frac{1}{2}$  days. 8—4 $\frac{1}{2}$ -inch corn9-5-inch corn-

10-54-inch corn came up in 172 days.

11-0-inch coru-

Nos. 8, 9, and 11, were dug up after 22 days, and it was found that No. 8 had one inch more to grow to reach the surface; Nos. 9 and 11 had just sprouted, but were short, and were within three inches of the surface. No. 10 came up in  $17\frac{1}{2}$  days, but the tender leaf remained green only six days, and then withered. The more shallow the seed was covered by the earth, the more rapidly the sprout made its appearance, and the stronger afterwards the stalk.

-----

QUALITIES OF POPADOES.—Notwithstanding you signified your intention to publish nothing further in regard to the *best* varieties of potatoes, last season, l will trouble you with some of my experience the past year. I raised 45 varieties—27 of them being seedlings, originated by Rev. C. E. Goodrich. of Utica. First in quality, hardiness, and productiveness, is the *Garnet Chili*. Being a *late* variety it did not fully ripen. I consider the *Garnet* superior to Prince Albert or Davis Seedling, being better in quality, yielding nearly double, and being entirely free from rot.

The Seal Foot I find to be an excellent early potato so mealy that it is very difficult to boil without bursting. "State of Maine," good, but not productive. "Peach Blow," poor, both in yield and quality, it being so strong as not to be eateable. "Michigan Red," do. "Jackson White," good; yield light—this latter variety stands high in the estimation of Bostonians, it being considered best in market.

The "St. Helenu," hardy, producing well, and good to bake early in fall and winter. "Jenny Lind," or California, a large, coarse variety, watery, late, and very liable to rot. "Early Hill," round, white, a good early potato—not so good nor so early as the "Early Blue," but yields much better—is cultivated for early market in this vicinity.

Among Mr. Goodrich's later seedlings are some exceeding in beauty anything I ever saw of the potato kind. I think that Mr. G. is entitled to be ranked among the public benefactors of the age, for he has certainly done more by experiments, introducing new varieties and contributions to agricultural papers, than any one else; and though such services may seem humble beside the display of "fancy stock," bought by the wealth of State associations, or individuals, it is possible that he is doing more for the masses than they all. Holden, Mass. U. W. GLEASON.

GARDEN CRESS.—This is a favorite salad plant, and, in this character, only the seminal plants are used. It is very hardy and prolific, and may be sowed once a week, from the opening of the ground in spring until the close of the season. Old rich garden soil is the most congenial to it, but any lands of fine texture will, if properly pulverized and enriched with putrescent manure, produce a good erop.

TO KEEP THES THEFT ON WHEELS.--- A correspondent of the Southern Planter says :---

"I ironed a wagon some years ago, for my own use, and before putting on the tires I filled the fellies with linseed oil; and the tires have worn out and were never loose. I ironed a buggy for my own use, seven years ago, and the tires are now as tight as when put on. My method of filling the fillies with oil is as follows: I use a long cast iron oil heater, made for the purpose; the oil is brought to a boiling heat, the wheel is placed on a stick, so as to hang in the oil, each felly one hour, for a common sized felly. "The timber should be dry, as green timber will not take oil. Care should be taken that the oil be not made hotter than a boiling heat, in order that the timber be not burnt. Timber filled with oil is not susceptible of water, and the timber is much more durable. I was amused, some time ago, when I told a blacksmith how to keep tires tight on wheels, by his telling me it was a profitable business to tighten tires, and the wagon-maker will say it is profitable to him to make and repair wheels, but what will the farmer, who supports the wheelwright and smith, say ?"

WHITEWASH.—This is a subject upon which our farmers require "line upon line and precept upon precept." Whitewash is one of the most valuable articles, when properly applied. It prevents not only the decay of wood, but conduces greatly to the healthiness of all buildings, whether of wood or stone. Outbuildings and fences, when painted should be supplied once or twice every year with a go d coat of whitewash, which should be prepared in the following way:

Take a clean, water-tight barrel or other suitable cask, and put into it a half bushel of lime. Slacke it by pouring water over hot, beiling hot, and in sufficient quantity to cover it five inches deep, and stir it briskly till thoroughly slacked. When the slackeing has been effected, dissolve in water, and add two pounds of sulphate of zine, and one of common salt. These will cause the wash to harden, and prevent its cracking, which gives an unseemly appearance to the work. If desirable, a beautiful cream color may be communicated to the above wash, by adding three pounds of yellow ochre, or a good pearl or lead color by the addition of lamp, or ivory black. For fawn color, add four pounds umber – Turkish or American—(the latter is the cheapest) one pound Indian red, and one pound common lamp black. For common stone color, add four pounds raw umber, and two pounds lampblack.

This wash may be applied with a common whitewash brush, and will be found much superior, both in appearance and durability, to common whitewash.

WHITE CLOVEN IN PASTURES.—The growth of white clover on soils natural to its production, may be encouraged and promoted by a top-dressing of plaster and ashes. Its chief value is for pasture, as it is of too dwarf a growth to give much of a hay crop. A writer in the Boston Cultivator says : "there is an advantage in pasturing white clover which does not strike every farmer. Each joint furnishes a fresh root, (and of course a fresh plant.) whenever such joint comes in close contact with the soil, consequently the more it is trodden the thicker it will spring up. Hence one reason why it grows most luxuriantly near the bars and gateways of our pastures, where cattle often congregate."

Many farmers have observed this last mentioned fact without getting hold of the reason thereof. The natural growth of various grasses, self-sown upon all our soils, is a matter of curious interest to the naturalist and the farmer obserant of nature.

Algeria has already (in march) begun sending to Paris, peas, French beans, new potatoes, strawberries, and other vegetables and fruits, which in Europe only attain maturity in summer and antumn.

To TRANSFER ENGRAVINGS TO WHITE PAPER.—Place the engravings for a few seconds over the vapour of iodine. Dip a slip of white paper in a weak solution of starch, and when dry, in a weak solution of oil of vitriol. When dry, lay a slip upon the engraving, and place them for a few minutes under a press. The engraving will thus be reproduced in all its delicacy and finish. The iodine has the property of fixing on the black parts of the ink on the engraving, and not on the white. This important discovery is yet in its infancy.—Builder. HONEY BELS.—Mr. W. H. Robinson, of Kane Co., Ill., writes to the *Prairie* Farmer, that farmers in his section are giving more than usual attention to bee-keeping; that there are near 200 swarms within the compass of two miles, and inquires, "can the country be overstocked ?"

THE CRANBERRY.—Mr. J. C. Young, of Lakeland, R. I., read a paper before the Farmers' Club of New-York, in which he says :

I think that my operation and the operations of my neighbors have demonstrated that--

The cranberry will grow and do well, though the vines be taken directly from the swamps;

That they will grow upon upland, and immediately upon its being broken up; Without manure ;

Without a wet subsoil :

Without artificial irrigation ;

With but moderate amount of labour ;

Producing a good-sized, deep-colored, well-matured, and highly-flavored berry, and that in dollars and cents the returns are suffleicut to induce many to follow the example set before them.

0-----

CHEAP PAINT.—Take one bushel of unslacked lime and slack it with cold water; when slacked add to it 20 lbs. of Spanish whiting, 17 lbs. of salt, and 12 lbs. of sugar. Strain this mixture through a wire sieve, and it will be fit for use after reducing with cold water. This is intended for the outside of buildings, or where it is exposed to the weather. In order to give a good color, three coats are necessary on brick and two on wood. It may be laid on with a brush similar to white wash. Each coat must have sufficient time to dry before the next is applied.

For painting inside walls, take as before, one bushel of unslacked lime, 3 lbs. of sugar, 5 lbs. of salt, and prepare as above, and apply with a brush.

I have used it on brick and find it well calculated to preserve them—it is far preferable to oil. I have used it on wood, and assure you that it will last longer on rough siding than oil paint will on planed siding or boards.

You can make any color you please; if you wish straw color, use yellow ochre instead of whitening; for lemon color, ochre and chrome yellow; for lead and slate color, lampblack; for blue, indigo; for green, chrome green. These different kinds of paint will not cost more than one-fourth as much as oil paints, including labor of putting on.

STY ON THE EVELUD.—A correspondent sends the following remedy, which she says she can vouch for :—Put a teaspoonful of black tea in a small bag; pour on it just enough boiling water to moisten it; then put it on the eye pretty warm. Keep it on all night, and in the morning the sty will most likely be gone; if not, a second application will remove it.

QUANTETY OF PORK FROM A BUSHEL OF CORN.—Experiments made by C. M. Clay, showed that one bushel of dry corn made 5 10-16 lbs. of pork ; of boiled corn, 14 7-16th lbs., and boiled meal from 16 to 18 lbs.

A FLY-PROOF WHEAT -- Zanesvile, Ohio, June 16, 1860.-I send you herein two hasds of a fly-proof wheat, lately introduced into this county from Hardin county, and called here the "Hardin Co., Wheat." Perhaps you may recognize the wheat, and give its proper name. Several years since, a farmer walking through his wheat-field in Hardin county, to examine whether it was worth cutting, found the midge had taken so nearly all that it was not worth cutting indeed seemingly all gone. But he observed two heads that looked full, and different from the others. He cut them and planted the seed in his garden.— From this beginning has sprung this variety—so goes the story. You will observe that the wheat is smooth—red chaff, and the caps so closely constructed as not to admit the fly. I examined a number of fields to-day, (in a drive of 14 miles,) of this wheat, and did not find the first head destroyed by fly, while the other varieties, Blue Stem, &c., were much damaged, some badly. I thought the information worth communicating. LEAAC DILLON.

P. S.—The prospect for wheat in this county is good, as it is for all crops grass, corn, potatoes and fruits.

THREAD WORMS IN HORSES.—H. W. Williams, Winnebago Co., Ill., inquires for a certain remedy for this difficulty with which his young horses are affected. Herbert recommends to administer balls of two drachms of tartar emetic, one scruple of ginger, with molasses and linseed oil sufficient to form the ball. Give one dose, every other morning, half an hour before feeding time.

BLOODY URINE IN CATTLE.-J. R. Schane, Williams Co., Ohio.-This usually indicates congestion and inflammation of the kidneys, and is attended by constipation of the bowels. Its causes can not, in all cases, be well determined.-Animals in high condition are subjected to it when near parturition, though at times it proceeds apparently from something taken with the food in the pasture ground. Youatt directs to bleed copiously at first, and repeat it if necessary, and administer Epsom salts, a pound for the first dose, and half pound doses every eight hours after, until the animal purges, which is usually the signal of recovery.

THE BODY AVENGED.—By too much sitting the body becomes unhealthy, and soon the mind. This is Nature's law. She will never see her children wronged. If the mind, which rules the body, ever forgets itself so far as to trample upon its slave, the slave is never generous enough to forgive the injury, but will rise and smite his oppressor. Thus has many a monarch mind been dethroned.

INPROVING GROWTH OF RHUBARB.—A constant reader inquires the reason for placing an open box, or barrel with both heads out, over rhubarb plants. It partially excludes the light, and causes the foot stalk to shoot up taller, to bring the surface of the leaf to the needed stimulous of sunshine. This increases the amount of the edible part, and makes it more tender and less acid.

DARK ROOMS.—Florence Nightingale in her notes on nursing, says : A dark house is almost always an unhealthy house, always an all aired house, always a dirty house. Want of light stops growth, and promotes scrofula, rickets, etc., among the children. People lose their health in a dark house, and if they get ill, they cannot get well again in it.

There out of many "negligences and ignorances" in managing the health of houses generally, I will here mention as specimens. First, that the female head in charge of any building does not think it necessary to visit every hole and corner of it every day. How can she expect those who are under her to be more careful to maintain her house in a healthy condition than she who is in charge , of it ?

Second, that it is not considered essential to air, to sun, and to clean rooms while un-inhabited; which is simply ignoring the first elementary notion of sanitary things, and laying the ground ready for all kinds of disease. Third, that the window, and one window, is considered enough to air a room. Don't imagine that if you who are in charge, don't look to all those things yourself, those under you will be more careful than you are.

It appears as if the part of the mistress was to complain of her servants, and to accept their excuse—not to show them how there need be neither complaints made or excuses.

MANURE FOR FLOWER BEDS.—Enthousiastic florists will not be over fastidious in the house of materials necessary for their growing treasures, but they may be pardoned for wishing to employ the least offensive substances. We have seen beautiful flower beds much disfigured by coarse stable manure spread upon the surface, and the perfume of the flowers did not always conceal a less agreable odor. The dark earth found in words, consisting of decayed leaves and other vegetable matter, is excellent plant-food. It is quite extensively used in green and hot-houses. It is very cleanly, and gives that pleasant mellowness to the soil, so agreable to the gardener, and so favorable to the plants. For more stimulating manure, dry bone sawings mixed with an equal part of earth, answers an excellent purpose. A solution of guano in water, though rather pungent to the olfactories when first mixed, is not permanently unpleasant when sprinkled upon the ground. A mixture of leaf mould, earth, and bone sawings is on the whole preferable.

THE ITALIAN BEES.—To a number of inquirers. We have as yet no definite information to give in regard to these bees. Experiments are being made with them in our own neighborhood, which we shall watch carefully. A number of intelligent bee-keepers are taking quite an interest in the matter, and the present season will probably determine, whether these bees are superior to our native kinds or not. We are inclined to think the "pureblooded" Ligurian bees will prove worthey of introduction here. There appears, however, to be some doubt as to the purity of part of those brought to this country. It is claimed, that those coming by the way of Germany, have been crossed more or less with the German bees. We are by no means certain that any of the pure stock yet been offered for sale in this country. Until this matter is settled, it will be quite as well for our readers to delay purchasing anywhere.

PEACHES IN POTS. -- In the orchard house of D. T. Colt, Norwich, Conn., peaches are cultivated in sixteen-inch pots, or in boxes about the same size, kept in the grapery during the winter, and removed to the open ground in June. Of course the trees are severely headed in, and kept within small compass. They will bear about two dozen peaches each, and when thus managed are a sure a crop as other fruit.

AN EXCELLENT CEMENT. - Five years ago, we applied a cement composed of white lead paint, whiting and dry white sand, to a small tin roof that leaked like a sieve ; it soon became nearly as hard as stone, has never scaled off, and and has kept the roof since then perfectly tight. It was put on about the consistency of thin putty. Slaters' cement for stopping leaks around chimneys, is composed of linseed oil, whiting, ground glass, and some brick dust. It is a good cement for this purpose ; also for closing the joints of stone steps to houses.

L-A firm in Savannah have just received an order for 200,000 feet of pine lumber for the Holy Land. Portions of the cargo are destined for Jerusalem and Damascus. A similar venture made last year was successful. As the Savannah Republican remark "there is something novel in the thought that the palaces of the Holy Land are to be rebuilt with materials taken from the forests of Georgia." TO PREVENT DOGS FROM GOING MAD. - Mix a small portion of the flour of sulphur with their food or drink, through the spring months. This is practiced in Europe to prevent the disease from breaking out among the packs of hounds which belong to the English nobleman, and is said to be a certain preventive.

RESTORING DAMAGED VELVET.—The Monitor de la Salud publishes the following method of restoring velvet to its original condition. It is well known that when velvet has been wet, not only its appearance is spoiled, but it becomes hard and knotty. To restore its original s: finess, it must be thoroughly damped on the wrong side, and then held over a very hot iron, care being taken not to let it touch the latter. In a short time, the velvet becomes, as it were, new again. The theory of this is very simple. The heat of the iron evaporates the water through the tissue, and forces the vapor out at the upper side; this vapor passing between the different fibres separatesthose which adhere together in hard bunches. If the velvet were ironed after damping, an exactly opposite result would be obtained, it is, therefore, necessary that the substance should not come in contact with the heated iron.

 $D_{AIRY}$ —TEMPERATURE OF.—When the temperature of the dairy is less than fifty degrees Farenheit, the milk will not ripen for churning, and in such case should be removed for a time to a temperature of fifty degrees. The sudden warming of the milk will not always enable it to yield up its butter readily.

SOLUTION FOR PRESERVING TIMBER.—S. Osborne, Litchfield Co., Ct. Dissolve one lb. blue vitriol in twenty qts. water, and let the wood soak in it from four to six days. This has been highly recommended, and a trial costs but little. We have not used it, and can not speak with certainty of its merits.

TO TEST THE QUALITY OF MILK.—C. J. Snow, Scott Co., Va. The comparative value of the milk from different cows in a dairy is easily ascertained by partly filling a number of glass tubes, putting the milk of each cow in a separate tube, and leaving it undisturbed until all the cream rises. The comparative thickness of the cream is then readily seen. A series of tumblers will serve equally well.

PARSNIPS FOR STOCK.--C. J. Edwards, Orange Co., N.-Y. This root certains a large amount of sugar and other nourishment, and is therefore well adapted for feeding stock, particularly milch cows. It adds to the richness of the milk, without importing any unpleasant flavor. It may remain in the ground the whole winter without injury, but on the contrary its quality is improved by the action of the frost. This makes it valuable for Spring feeding. It requires a deep, rich soil and clean tillage

RULE FOR DRAINING. — This rule, which John Johnston gives, "Dig holes, and see if the water rises in them," is too brief. It may not rise during the entire summer and autumn, the subsoil being then dry; and yet there may be a month in the early part of spring when the subsoil is saturated with water, which may entirely suspend all operations, and which should be thoroughly drained off. I have had much to do with just such soils.

 $F_{EVER AND}$  AGUE DISTRICTS.—If breakfast were taken before gaing out in those regions where chills and fever, and fever and ague prevail, and if, in addition. a brisk fire were kindled in the family room, for the hour including sunset and sunrise, these troublesome maladies would diminish in any one year, not ten-fold, but a thousand-fold, because the heat of the fire would rarify the mismatic air instantly, and send it above the breathing point.

# THE FARMERS' JOURNAL.

### MONTREAL RETAIL MARKET.

			BONSECOURS				
Compton Flore 1	FLOUR.	s.	d		8.	. d	
Country Flour, per quintal		18	56	ક્ર	16		
		11	6	a	12		
maian Meal, per quintal		- 0	) (	a	- 0	) <u></u>	
Wheet non minet	GRAIN.						
Wheat, per minot		1	10	a	2	0	
Parla Per minot	••••••	- 0	0 0				
Barley, per minot	·····	- 0	0 0	a			
rease, per minot		3	9	a	4		
DUCKWHEAL, DET MINOL		2	- 9	3	3		
Bre new wirest	• • • • • • • • • • • • • • • • • • • •	5	0	a	5		
Tye, per minot.		- 0	0	a.	Õ	-	
Finather monorminat	· · · · · · · · · · · · · · · · · · ·	5	6	а	6	Ű.	
minotity, per minot		- 0	0	a	Ő		
Furtherne (al.d.)	OWLS AND GAME.					.,	
Turkeys, (old) per couple	·····	5	6 O	a	7	6	
LULNEYS, (YOUNG) DEP COUD		0	0 (				
decse, (young) per couple .		- 4	- 0	a	6		
Duoks, per couple		2	6	8	4	ő	
Ducks, (while) per couple .		3		a	ŝ	Ĕ	
ruwis, ther counte		$^{2}$	6	a	3	ē	
VAIGACHS, DEF COUDIE		- 0	- 0	a	ŏ	- ù	
		1	3	a	2	ŏ	
rigeous (which ber dozen		5	- 0	a	$\tilde{5}$	6	
Lartinges, per couple		- 0	0	8	ŏ	Ö	
woodcock, per brace		- 0	Ő	a	ĕ	6	
liares, per couple	MEATS.	0	Ö	a	ŏ	ö	
Band non lh	MEATS.				0	¢.	
Beel, per 10	•••••••••••••••••••••••••	- 0	4	a	0	9	
Notten and the second second	•••••••••••••••••••••••••••••••••••••••	- 0	-5	8	Ö	-	
Mutton, per quarter	• • • • • • • • • • • • • • • • • • • •	5	0	a	7	ò	
Lamo, per quarter		<b>2</b>	4	8	ō	Ő	
veal, per quarter		5	õ	8	12	ŝ	
		35	Ŏ	a	40	Ö	
Pork, (fresh) per 100 lbs	IRY PRODUCE.	37	6	a	40	ő	
Bratten (freel) was 11	TRY PRODUCE.			-	10		
Butter, (iresh) per 10		0	9	a	1	0	
		0	8	8	ó	9	
Cheese, per 10, skill milk .	• • • • • • • • • • • • • • • • • • • •	0	0	a	ŏ	- Ö	
Cheese, per 10, sweet do		0	0	a.		ŏ	
	VEGETABLES			-		v	
Beans, (American,) per mine	pt	0	0	A.	0	ð	
Potetoes (now) now here	t	7	6	n.	10	0	
Totatoes, (new) per bag		3	9	8	4	ē.	
Oniona non husbol	•••••••••••••••••••••••••••••••••••••••	0	0	8.	ō	ò	
sateries per sublict		Ó	0	8	- Ö	Ö.	
Sugar Manla new lh (	R AND HONEY.				0	••	
Vanio Sumun non gallon	•••••••••••••••••••••••••••••••••••••••	0	41	a	0	5	
maple by rup per gallon,		0	0	a	Ő	6	
Land non lh	CELLANEOUS.						
Egge ner dozen		0	8	8	0	9	
		0	6	a	ŏ	74	
		0	0	n	ŏ	0	
		0	3	8	ŏ	ě	
Ovanges per har	• • • • • • • • • • • • • • • • • • • •	10	0	a	20	ŏ	
Hides nor 100 1h-	••••••••••••••••••••••••••••••••••	20	Ő	a	$\tilde{25}$	Ū.	
Pallow ner lb	• • • • • • • • • • • • • • • • • • • •	0	ŏ	8	0	Ő.	
renow, her to	RFAD	0	41		ŏ	5	
Brown Logf	BREAD.		- 2		v	•	
White Loaf	ынар. 	0	10	8	0	0	
TITLE TAAP	•••••••••••	0		<u>a</u>	ň	ŏ	