

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. 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 filming, are checked below.

L'Institut a microfilmé 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 filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

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/
Cartes géographiques en couleur

Pages detached/
Pages détachées

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/
Transparence

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

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

Includes index(es)/
Comprend un (des) index

Title on header taken from: /
Le titre de l'en-tête provient:

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

Additional comments: / **Wrinkled pages may film slightly out of focus. Page 238 is incorrectly numbered page 338.**
Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

AGRICULTURAL REVIEW.

MAY.

CONTENTS:—**Official Department.**—Prize list of the next Provincial Exhibition to be held in Montreal on the 14, 15, 16, 17, and 18 September.—Horses—Cattle—Sheep—Swine—Poultry—Grain, Field Roots, and other farm products—Agricultural Implements—Rules and regulations—Entries—Transport of articles, placing them on exhibition, and charge of them while there—Steamboats—Railroads—Customs—Admission to the grounds—Judges and their duties—The general superintendent—Paying the premiums—Miscellaneous—Programme for the week.—**Editorial Department.**—Prospects of the Montreal Provincial Exhibition—\$12,000 offered in premiums—The Agricultural, Horticultural, and Industrial departments—Challenge to the Upper Canada exhibitors—The grounds—The *L. C. Agriculturist*—Advantages of rural life.—**Farm Operations.**—Tobacco culture in Connecticut—Preparation of the seed beds—Preparation of the ground—Insects injurious to the crop—Cultivation and harvesting—Average production—Experiments in potato culture—Prince Albert's farm.—**Breeder's Department.**—The treatment of bruises—Feeding horses—The stable—Management of hacks—To cure kicking horses—Hints for butter making—Depth of milk—New way of making butter—Churning—Working butter—Washing butter.



RULES OF THE PROVINCIAL EXHIBITION.

1. All entries must be made on printed forms, which may be obtained of the Secretaries of Agricultural Societies, or of Mechanics' Institutes, free of charge. These forms are to be filled up and signed by the exhibitor, enclosing a dollar for membership, and sent to the Secretary of the Board of Agriculture, for Lower Canada, Montreal previous to or on the following named dates:—

2. *Horses, Cattle, Sheep, Swine, Poultry.* Entries in these classes must be made, by forwarding the entry form, as above mentioned, filled up, and member's subscription enclosed, on or before Saturday, August 15th, four weeks preceding the show.

3. In the classes of Blood Horses and pure bred cattle, full pedigrees, properly certified, must accompany the entry. No animals will be allowed to compete as pure bred, unless they possess regular Stud or Herd Book pedigrees, or satisfactory evidence be produced that they are directly descended from such stock. In the class of Durham cattle particularly, no animal will be entered for competition, unless the pedigree of the same be first inserted in the English or American Herd Book, or in the Upper Canada Stock Register, kept at the office of the Board of Agriculture.

4. *Grain, Field Roots, and other Farm Products, Agricultural Implements, Machinery, and articles generally,* must be entered previous to or on Saturday, August 22, three weeks preceding the show.

5. Exhibitors are particularly requested to take notice that it is essential that the entries be made at the dates above mentioned. It is intended to prepare a Catalogue of a portion of the Exhibition, and this cannot be done unless the entries are made in time. Therefore after these dates for the respective classes, no entry will be received. The entry paper and subscription money will be returned to any person forwarding them.

6. In the live stock classes, the entry must in every instance be made in the name of the *bona fide* owner; and unless this rule be observed no premium will be awarded, or if awarded will be withheld.

7. In all the other classes entries must be

made in the names of the producers or manufacturers only.

8. In the Agricultural department the competition is open to exhibitors from any part of the world.

9. On the entry of each animal or article, a card will be furnished the exhibitor specifying the class, the section, and the number of the entry, which card must remain attached to such animal or article during the exhibition.

Transport of Articles, placing them on Exhibition, and charge of them while there.

10. All articles for Exhibition must be on the grounds on Monday, September 22nd, except live stock, which must be there not later than Tuesday 23rd, at noon. Exhibitors of machinery and other heavy articles, are requested to have them on the grounds as far as possible during the week preceding the show.

11. Exhibitors must provide for the delivery of their articles upon the show ground.—The Association cannot in any case make provision for their transportation, or be subjected to any expense therefor, either in their delivery at or return from the grounds; all the expenses connected therewith must be provided for by the exhibitors themselves.

12. Articles not accompanied by their owners may be addressed to the care of the Superintendent of the exhibition, who will receive them, on their being delivered at the grounds, but in no case will such articles be brought on the grounds and placed on exhibition, except by and at the expense of the owners or their authorized agents.

13. Exhibitors on arriving with their articles will apply to the superintendent of the grounds, who will be stationed within the entry gate, and will inform them where the articles are to be placed.

14. Exhibitors will at all times give the necessary personal attention to whatever they may have on exhibition, and at the close of the show take entire charge of the same.

15. No articles or stock exhibited will be allowed to be removed from the grounds, till the

close of the exhibition, upon the delivery of the President's address, on Friday afternoon under the penalty of losing the premiums.

16. While the Directors will take every possible precaution, under the circumstances, to insure the safety of articles sent to the exhibition, yet they wish it to be distinctly understood that the owners must themselves take the risk of exhibiting them; and that should any article be accidentally injured, lost, or stolen, the Directors will give all the assistance in their power towards the recovery of the same, but will not make any payment for the value thereof.

Steamboats, Railroads, Customs.

17. The Association will make arrangements with Steamboat and Railroad proprietors for carrying articles and passengers at reduced rates.

18. Arrangements will be made with the Customs department for the free entry of articles for competition.

Admission to the Grounds.

19. Tickets from the Secretary's Office will be furnished each person becoming a member previous to or on Saturday, September 12th, which will admit himself only, free to every department of the exhibition, during the Show. Life members admitted free throughout the Exhibition.

20. No members' tickets will be issued after the above last mentioned Saturday evening, but those issued up to that time will be good up to the close of the show.

21. Necessary attendants upon stock and articles belonging to exhibitors, will be furnished with admission tickets with their names written upon them, which ticket will be good at the *Exhibitors' Gate only*, during the show.

22. The admission fees to non-members, on Tuesday and Wednesday, will be half-a-dollar, and on Thursday and Friday, a quarter dollar, each time of entering through the gates.

23. Tickets of admission to those who are not members, will be issued on and after Tuesday morning, at 25 cents each,—two such tickets to be given up at the gates each time of admission, on Tuesday and Wednesday, and one such ticket on Thursday and Friday, in accordance with the above rates. Children under fourteen years of age, half-price.

Judges and their duties.

24. The judges will be appointed by the council of the Association previous to the Exhibition, and will receive a circular informing them of the fact and inviting them to act.

25. The judges are invited to report themselves at the Secretary's office, presenting their circular of appointment, immediately on their arrival at the grounds.

26. The judges will meet, at the committee room on the grounds, on Tuesday, September 15th at 10 o'clock, A.M., to make arrangements for entering upon their duties, and will then be furnished with the committee books containing the numbers of the entries in each class.

27. No person shall act as a judge in any class in which he may be an exhibitor.

28. In addition to the stated premiums offered for articles enumerated in the list, the judges will have the power to award discre-

tionary premiums for such articles, not enumerated, as they may consider worthy, and the Directors will determine the amount of premium.

29. In the absence of competition in any of the Classes, or if the Stock or articles exhibited be of inferior quality, the judges will exercise their discretion as to whether they will award the first, second, or any premium.

30. Each award must be written in a plain careful manner, on the blank page opposite the number of the entry; and the reasons for the award should be stated when convenient.

31. No person will be allowed to interfere with the judges while in the discharge of their duties. *Exhibitors so interfering will forfeit their rights to any premium to which they might otherwise be entitled.*

The General Superintendent.

32. A General Superintendent will be appointed, who will have the entire supervision of the grounds and the arrangements of the Exhibition. He will have an office upon the ground, where all persons, having inquiries to make in relation to the arrangements, will apply.

Paying the Premiums.

33. The Treasurer will be prepared to commence paying the premiums on Saturday, Sept. 19th, at 9 a. m., and parties who shall have prizes awarded them are particularly requested to apply for them before leaving Montreal or leave a written order with some person to receive them, stating the articles for which prizes are claimed.

34. Persons entitled to cash premiums must apply for them at the Secretary's office, who will give *Orders on the Treasurer* for the amount.

35. These orders must be endorsed, as they will be payable to *order*, not to *bearer*, and on presentation to the Treasurer, properly endorsed, will be paid, either in cash, or by cheque on the Bank.

36. Orders for premiums not applied for on Saturday, as above, will be given by the Secretary, and the amount forwarded by the Treasurer, on receipt of proper instructions.

Miscellaneous.

37. Provender will be provided by the Board for live stock at cost price. For information, exhibitors will apply to the Superintendent of the grain and fodder department at his office.

38. An auctioneer will be on the ground after the premiums are announced, for the purpose of selling any animal or article which the owner may wish to dispose of, and every facility will be afforded for the transaction of business.

39. In case the Directors shall require any particular information in reference to animals or articles taking first prizes, the owners will be expected to transmit it, when requested to do so.

Programme for the Week.

1. Monday, Sept. 14th, will be devoted to the final receiving of articles for exhibition, and their proper arrangement. None but officers

judge, exhibitors, and necessary attendants will be admitted.

2. Tuesday, 15th. The judges will meet in the Committee Room at 10 a.m., and will commence their duties as soon as possible afterwards. As soon as they have made their awards, they will report to the Secretary, and will then be furnished with the price tickets, which they are requested to place on the proper articles before dispersing. Non-members admitted this day on payment of 50 cents each time.

3. Wednesday, 16th. The judges of the various classes will complete their awards, and will place all of the prize tickets if possible. Admission this day the same as yesterday.

4. Thursday, 17th. All the remaining prize tickets not yet distributed by the judges will be placed upon the proper articles this morning, before 9 o'clock, if possible. The public

will be admitted this day on payment of 25 cents by each person, each time of entering. The amateur bands of music in competition for prizes will play upon the grounds.

5. Friday, 18th. The annual meeting of the Directors of the Association will take place at 10 a.m., in the Committee Room. The bands will continue to play upon the grounds. The President will deliver the Annual Address at 2 p.m., after which the Exhibition will be considered officially closed, and exhibitors may commence to take away their property. Admission to-day the same as yesterday.

6. Saturday, 19th. The Treasurer will commence paying the premiums at 9 a.m. Exhibitors will remove all their property from the grounds and buildings. The gates will be kept closed as long as necessary, and none will be admitted except those who can show that they have business to attend to.

1st DIVISION—STOCK.

MEDALS.—In all cases the winner of a first prize of \$40 will be entitled to the Association's Gold Medal, value \$40, instead, if he prefer it: and the winner of the 1st prize of \$20, or upwards will be entitled to the Silver Medal, at \$10, if he prefer it, with the difference in money.

1st SUBDIVISION—HORSES.

1st Class—Heavy Draught Horses.

SECT.	Prizes	1st	2nd	3rd
1 Heavy draught stallion 1300	\$40	25	12	
2 Three years old stallion....	22	14	7	
3 Two years old stallion.....	14	10	4	
4 Yearling colt.....	8	6	4	
5 Brood mare and foal 1200 lbs	22	14	6	

SECT.	Prizes	1st	2nd	2rd
6 Three years old filly.....	\$18	11	6	
7 Two years old filly.....	14	9	4	
8 Yearling filly.....	8	6	4	
9 Span of draught horses weighing over 1300 lbs.....	20	15	10	

2nd Class—Agricultural Horses.

Prizes the same as in Class 1st.

4th Class—Blood Horses.

Prizes the same as in Class 1st.

Horses shown as single carriage horses, as saddle horses, or as spans of team or carriage horses, must not be stallions.

3rd Class—Road or Carriage Horses.

Prizes the same as in Class 1st.

10 Single carriage horse.....	8	6	4
11 Saddle horse.....	8	6	4

2nd SUBDIVISION—CATTLE.

1st Class—Durham.

SECT.	Prizes	1st	2nd	3rd	4th
1 Bull 4 years old and upwds.\$36	24	16	8		
2 Three years old bull.....	32	20	12	6	
3 Two years old bull.....	24	16	9	5	
4 One year old bull.....	20	12	8	4	
5 Bull calf (under 1 year)...	16	10	6	3	

SECT.	Prizes	1st	2nd	3rd	4th
6 Cow 4 years and upwards.\$20	12	8	4		
7 Three years old cow.....	16	10	6	4	
8 Two years old heifer.....	12	8	5	3	
9 One year old heifer.....	10	6	4	2	
10 Heifer calf (under 1 year). .	6	4	2	1	

N. B.—A certificate of Herd Book Pedigree, or a sufficient Reference to the Herd Book in which they are registered, will be required of all animals in the Durham class, along with or previous to the application to enter them for exhibition. The pedigrees of others should be as full and correct as possible.

2nd Class—Herefords.

Prizes the same as in Class 1st.

3rd Class—Devons.

Prizes the same as in Class 1st.

4th Class—Ayrshires.

Prizes the same as in Class 1st.

5th Class—Galloway, or Aberdeen Cattle.

Prizes the same as in Class 1st.

6th Class—Grade Cattle.

Prizes the same as in Class 1st.

7th Class—Fat and Working Cattle, any Breed.

SECT.	Prizes	1st	2nd	3rd
1 Fat ox or Steer.....	\$30	20	12	
2 Fat cow or heifer.....	40	20	12	
3 Yoke 3 years old steers.....	16	10	6	

SECT.	Prizes	1st	2nd	3rd
4 Yoke of working oxen.....	20	12	8	
5 Team of oxen, not less than ten from one Township....	30	0	0	

The Judges shall ascertain, in deciding on bull calves in any of the foregoing classes, whether the animal has been suckled or raised by pail, and make allowances accordingly.—The exact age of young animals must be stated on the cards, and will be taken into consideration by the Judges in making their awards; and any person understating the age of an animal will forfeit the premium to which he might otherwise be entitled.

Young cattle may compete, if the exhibitor thinks it, in an older class than that to which they properly belong; but no animal will be allowed to compete in more than one of the foregoing sections, except for the Medals, or where all classes and ages compete together, or in the herds. Cows in any of the above classes must be giving milk at the time of the exhibition, or be evidently well gone in calf.

An animal will not be allowed to compete as a three year old cow unless she has had a calf, or is evidently in calf; but a two year old animal having had a calf will be allowed to compete as two year old heifer, if the owner thinks fit.

Prizes will be awarded to animals of other breeds than those above mentioned, if deemed worthy. Fat Cattle and fat Sheep can be exhibited only by persons who have owned and fed them at least six months previously.

4th SUBDIVISION—SHEEP.

1st Class—Leicester.

SECT.	PRIZES 1st	2nd	3rd	SECT.	PRIZES 1st	2nd	3rd
1 Ram, two shears and over..	\$16	10	5	4 Two ewes, 2 shears and over	\$16	12	6
2 Shearling ram.....	16	10	5	5 Two shearling ewes.....	12	8	4
3 Ram lamb.....	8	4	2	6 Two ewes lands.....	C	4	2

2nd Class—Cotswolds.

Prizes the same as in Class 1st.

3rd Class—Other Long Woolled Sheep,

Prizes the same as in Class 1st.

4th Class—South Downs.

Prizes the same as in Class 1st.

5th Class—Cheviots.

Prizes the same as in Class 1st.

6th Class—Other Medium Woolled Sheep.

Prizes the same as in Class 1st.

7th Class—Merinos and Saxons.

Prizes the same as in Class 1st.

8th Class—Other Fine Woolled Sheep.

Prizes the same as in Class 1st.

9th Class—Fat Sheep.

SECT.	PRIZES 1st	2nd	3rd	SECT.	PRIZES 1st	2nd	3rd
1 Two fat wethers.....	\$12	8	4	2 Two fat ewes.....	\$12	8	4

* Sheep that have been shown in any other classes cannot compete as fat sheep.

* Sheep will not be allowed to compete in any class with more than the present season's growth of wool upon them.

If necessary to decide the merits of different sheep satisfactorily, the Judges shall have the power of causing them to be shorn upon the ground.

4th SUBDIVISION—SWINE.

1st Class—Yorkshires, Large Breed.

SECT.	PRIZES 1st	2nd	3rd	SECT.	PRIZES 1st	2nd	3rd
1 Boar, 1 year and over....	\$15	10	6	3 Breeding Sow 1 year and over	10	7	4
2 Boar, under 1 year.....	10	6	4	4 Sow, under 1 year old....	5	4	3

2nd Class—Large Berkshires.

Prizes the same as in Class 1st.

3rd Class—All other Large Breeds.

Prizes the same as in Class 1st.

4th Class—Suffolks, Small Breed.

Prizes the same as in Class 1st.

5th Class—Improved Berkshires.

Prizes the same as in Class 1st.

6th Class—All other Small Breeds.

Prizes the same as in Class 1st.

In the classes of Pigs, the precise age of the animal is to be stated on the cards.

With a view of encouraging largely the importation of improved stock, the exhibitor of any male animal imported into this Province from Europe since the last Exhibition, which shall take the first prize in any of the above classes, will be paid three times the amount of the premium offered in the list; the exhibitor of any female animal imported from Europe within the same time, taking the first prize, will be paid double the amount offered; the exhibitor of any male animal imported into the Province from any part of America within the same time, taking the first prize, will be paid double the amount of prize offered; and of any female animal imported within the same time, and taking the first prize, one-half addition to the amount of prize offered in the list. Such animal to be the bona fide property of persons residing in Lower Canada. Satisfactory evidence must have been given at the time of making the entry that the animal has been imported within the time named, or the increased prize will not be paid.

5th SUBDIVISION—Foultry, &c.

SECT.	Prizes 1st	2nd	SECT.	Prizes 1st	2nd
1 Pair of white dorkings.....	\$4	2	17 Pair of smooth-legged bantams...	\$2	1
2 Pair of spangled do.	4	2	18 Pair of turkeys, white.....	4	2
3 Pair of black Polands.....	4	2	19 Pair of turkeys, coloured.....	4	2
4 Pair of white do.	4	2	20 Pair of wild turkeys.....	4	2
5 Pair of golden do.	4	2	21 Pair of largo geese.....	4	2
6 Pair of silver do.	4	1	22 Pair of Bremen geese.....	4	2
7 Pair of game fowls.....	4	2	22 Pair of Chinese geese.....	4	2
8 Pair of Jersey Blues.....	4	2	23 Pair of Muscovy ducks.....	4	2
9 Pair of Cochin China, Shanghai, Canton, or Braham Pootra fowls.	4	2	24 Pair of common ducks.....	4	2
10 Pair of black Spanish fowls.....	4	2	25 Pair of Aylesbury ducks.....	4	2
11 Pair of black Java fowls.....	4	2	26 Pair of Poland ducks.....	4	2
12 Pair of Bolton bays.....	4	2	27 Pair of Rouen ducks.....	4	2
13 Pair of Hamburg fowls.....	4	2	28 Pair of Guinea fowls.....	4	2
14 Pair of Dominique fowls.....	4	2	29 Pair of pea fowls.....	4	2
15 Pair of feather-legged bantams...	4	2	30 Collection of pigeons.....	4	2
			31 Pair of rabbits.....	2	2

Exhibitors will have to provide their own coops, and are recommended to have them about three feet cube in size, for convenience of arrangement on the grounds.

2nd DIVISION—AGRICULTURAL PRODUCTIONS.

1st Class—Grains, Seeds, &c.

SECT.	Prizes 1st	2nd	3rd	SECT.	Prizes 1st	2nd	3rd
1 White winter wheat.....	\$6	2	2	18 Alsike clover seed.....	\$6	4	2
2 Red winter wheat.....	6	4	2	19 Hemp seed.....	6	4	2
3 White spring wheat.....	6	4	2	20 Flax seed.....	6	4	2
4 Red spring wheat.....	6	4	2	21 Mustard seed.....	6	4	2
5 Barley (two rowed).....	6	4	2	22 Swedish turnip seed, (20 lbs.)	6	4	2
6 Barley (6 rowed).....	6	4	2	23 14 lbs. white Belgian field carrot seed.....	6	4	2
7 Rye.....	6	4	2	24 12 lbs. long and mangel wurzel seed.....	6	4	2
8 Oats, white.....	6	4	2	25 12 lbs. yellow globe mangel wurzel seed.....	6	4	2
9 Oats, black.....	6	4	2	26 Bale of hops, 112 lbs.....	20	12	8
10 Field peas.....	6	4	2	27 Horse.....	6	4	2
11 Marrowfat peas.....	6	4	2	28 Buckwheat.....	6	4	2
12 Tares.....	6	4	2	29 Millet.....	6	4	2
13 White field beans.....	6	4	2	30 Hungarian grass seed.....	6	4	2
14 Indian corn in the ear, white.	6	4	2				
15 do. do yellow	6	4	2				
16 Timothy seed.....	6	4	2				
17 Clover seed.....	6	4	2				

2nd Class—Roots and other Field Crops.

SECT.	Prizes 1st	2nd	3rd	SECT.	Prizes 1st	2nd	3rd
1 Pink-eyed potatoes.....	\$3	2	1	14 Mangel wurzel, long red (12)	\$3	2	1
2 Cup potatoes.....	3	2	1	15 Red globe mangel wurzel (12)	3	2	1
3 Garnet Chilis.....	3	2	1	16 Yellow globe man. wur. (12)	3	2	1
4 White potatoes.....	3	2	1	17 Long yellow man. wur. (12)	3	2	1
5 Red potatoes.....	3	2	1	18 Khol rabi (12).....	3	2	1
6 Blue potatoes.....	3	2	1	19 Sugar beet (12).....	3	2	1
7 Any other sort.....	3	2	1	20 Parsnips (20).....	3	2	1
8 Collection of field potatoes..	3	2	1	21 Large squashes for cattle (2)	3	2	1
9 Swede turnips.....	3	2	1	22 Mammoth field pumpkins (2)	3	2	1
10 White globe turnips.....	3	2	1	23 Tobacco leaf (20 lbs.).....	3	2	1
11 Aberdeen yellow turnips....	3	2	1	24 Broom corn brush (28 lbs.)..	3	2	1
12 Twenty roots red carrots....	3	2	1	25 Flax, scutched (112 lbs.)... 24	16	16	16
13 Twenty roots white carrots..	3	2	1	26 Hemp (112 lbs.).....	24	16	16

[The roots in the above class to be certified as of field culture by the Exhibitor.] Roots of other varieties than those above named will receive prizes if worthy. The names of the different varieties of wheat or other grain, roots, &c., must be inserted by such exhibitor in his list of entries.

3rd Class—Dairy Products, &c.

SECT.	Prizes 1st	2nd	3rd	4th	SECT.	Prizes 1st	2nd	3rd
1 Kegs of butter, 56 lbs....	\$12	10	8	6	5 Honey, in the comb, 10 lbs..	\$3	2	1
2 Firkins of Butter, 28 lbs...	8	6	4	2	6 Jar of clear honey.....	4	2	1
3 Cheese, 30 lbs.....	16	8	6	4	7 Maple sugar, 30 lbs.....	3	2	1
4 Two stilton cheeses, 14 lbs.	10	8	6	4	8 Ham, cured.....	3	2	1

Persons taking premiums on dairy products will be required to furnish statements of the mode of manufacture, including the breed and number of cows, size of farm, description of dairy premises, treatment of milk, salt used, quantity of produce, and any other practical information that they may be able to afford, before being paid the amount of premium.

3rd DIVISION—AGRICULTURAL IMPLEMENTS.

1st Class—Implements for the pulverisation of the soil.															
Secr.			PRIZES			Secr.			PRIZES						
1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd				
1 Iron plough.....	\$12	8	4	6 Light harrows.....	\$6	4	2	2 Wooden plough.....	12	8	4	7 Drill harrows.....	6	4	2
3 Trench plough.....	12	8	4	8 Iron roller.....	11	8	6	4 Subsoil plough.....	12	8	4	9 Wooden roller.....	10	5	0
5 Heavy harrows.....	6	4	2	10 Collection of hand implem.	8	4	0								
2nd Class—Implements for the cleaning of the soil.															
Secr.			PRIZES			Secr.			PRIZES						
1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd				
1 Scarifiers or cultivators.....	\$12	8	4	3 Horse hoes.....	\$5	3	4	2 Double mold-board plough..	10	6	4	4 Collection of hand Implements...	4	3	
3rd Class—Implements for harvesting.															
Secr.			PRIZES			Secr.			PRIZES						
1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd				
1 Grain sowing machine.....	\$12	8	4	8 Collection of hand implements...	\$4	2	2 Beat and carrot sow. do.	4	2	0	9 Horse tedder.....	8	4	4	
3 Grass seed sowing do...	4	2	0	10 Horse rakes.....	8	4	4 Compost sowing do...	4	2	0	11 Potatoe diggers.....	6	4	4	
5 Mowers.....	20	12	8	12 Waggon.....	8	4	6 Reapers.....	20	12	8	13 Scotch carts.....	8	4	4	
7 Mowing & reaping combined.	20	12	8	14 Carts.....	8	4									
4th Class—Implements for the preparation of Agricultural products.															
Secr.			PRIZES			Secr.			PRIZES						
1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd				
1 One horse thrashing machine	\$16	8	4	9 Potatoe washers.....	\$8	4	2 Two horses do. do.	20	12	8	10 Cooking apparatus.....	8	4	4	
3 Clover thrashing do.	12	6	2	11 Root cutter.....	8	4	4 Corn hulling do.	8	4	0	12 Straw cutter.....	8	4	4	
5 Flax scutching do.	20	12	8	13 Corn crushers.....	8	4	6 Hemp do. do.	20	12	8	14 Churns.....	8	4	4	
7 Separators.....	8	4	0	15 Cheese press.....	8	4	8 Fanning mills.....	8	4	0	16 Cider press.....	8	4	4	
5th Class—Other Implements not mentioned above.															
Secr.			PRIZES			Secr.			PRIZES						
1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd				
1 Stump extractor.....	\$8	4	2	3 Bee-hives.....	\$4	2	2 Gates.....	4	2	2	4 Weighing machines.....	4	2	2	

Music.—Prizes offered for instrumental Bands:—For the Best Canadian Amateur Band, consisting of not less than eight performers, of whom there shall not be more than two professional artists. \$60 40 20.

Each Band will be required to execute the following pieces of music, viz:—The National Anthem; Rule Britannia; a quick Step; Waltz; Song; Polka; Set of Quadrilles, and a Medley, or Operatic Piece; and to be on the grounds under the direction of the Committee during the continuance of the Exhibition. Apply to the secretary of the Board at Montreal.

EDITORIAL DEPARTMENT.

THE MONTREAL PROVINCIAL EXHIBITION.

We have much pleasure in publishing at this early period of the year the Prize list of the coming exhibition to be held in Montreal on the 14, 15, 16, 17 and 18th September next. The success of these great gatherings of our industrial productions depend to a very great extent on the diffusing throughout the province of proper information as regard the time and place of the exhibition together with the amount of prizes offered. With the view of securing prompt action in every department connected with the exhibition it has been decided that three great divisions should be adopted as to the organization of the Agricultural, Industrial, and Horticultural Departments—each being respectively under the special control of the Board of Agriculture, of the Board of Arts, and of the Montreal Horticultural Society. Each is to publish its own prize list and manage the details coming under its own department. Thus

the Board of Arts will publish their own prize list and so will the Montreal Horticultural Society. For general arrangements only will the united control of every department be requisite.

We now publish the Agricultural prize list, and we have reason to believe the industrial and Horticultural prize lists will soon follow. Some \$12,000 will be offered for prizes and we can fairly anticipate that this provincial exhibition will prove the largest and most successful gathering which ever took place in the whole Province. The provincial exhibition of Upper Canada takes place this year at Kingston the week following so that we are in hopes that several of the leading western exhibitions will favor Montreal with their presence, before going to Kingston. Indeed, we have personally the promise of several of the leading farmers of Upper Canada, that they will compete at Montreal this year, and test their superiority over the Lower Canada traders. With this view the

Board of Agriculture have adopted the Upper Canada Prize List and Regulations so as to afford them every inducement to join in the Montreal coming exhibition. So that every western farmer might send a duplicate of his entries to the Lower Canada Board of Agriculture, with the assurance that he has a right to compete for the amount offered for prizes.

The industrial Palace is left to the industrial department, but splendid grounds have been selected in its vicinity, where the agricultural department will be provided with every requisite.

DISADVANTAGES OF RURAL LIFE.

It has become very much the fashion for the speakers at our country fairs, and writers in agricultural papers, to congratulate the farmer on his enviable position as a tiller of the soil,—holding daily communion with Nature, breathing the free mild air of heaven, with cheerful exercise and occupation, contentment, &c. Now, cant is always disgusting; and it strikes me that there has, of late, been not a little of it concerning country life; and as the RURAL is open to discussions upon all subjects, I have a word to say on this, which, if not quite as flattering as much that we hear and read, may at least have the merit of being equally true.

Every one who knows anything about farming knows that it is very hard and very dirty work. I am aware that it is exceedingly delightful to sit in the shade of some thick branching, wide-spreading tree, on a lovely July day, and watch the mowers at work in a luxuriant meadow. How like play it looks; how beautifully the tall grass comes down, rank after rank; what music in every swing of the scythe, as it rushes in and out the mimic forest; and then the delicious fragrance which floats upon the air,—verily, there is no perfumery equal to the breath of new-mown hay! That is the poetry of the thing. But come out of your leafy retreat, take the scythe in your own hands, bend your back to the required angle, and keep it so bent, hour after hour, through the whole day, with the sun (which you thought was shining just right, as you sat in the shade,) beating upon you, and not a breath of air stirring. That, I am inclined to think you will conclude, is plain prose.

I do not, by any means, wish to be understood as speaking of work with contempt, for I know that everything worth having must be toiled for, and often the highest good comes only by the hardest labor. And, moreover, there is a vast deal to be done in the economy of life, which is very dirty and disagreeable, and no one is less a man or woman because it chances to fall to his or her lot to do it. But what I do maintain is, that it is always better to have a correct and definite understanding of our position and circumstances; whatever is peculiar or disagreeable therein, for it is only thus that we can apply ourselves intelligently and effectually to overcome what can be overcome, or "making a truce with necessity" bear courageously what must be borne, and so get from life all good that the Creator, in bestowing it, designed it should yield us.

I have observed that those of our farmers

who are most thoroughly imbued with the idea that their condition is the most enviable to which mortal ever need aspire, and who look upon "corn and pumpkins plenty" as the sum and substance of human felicity, are usually the most ignorant, undesirable part of community, almost invariably pro-slaveryites of the strictest sect, thoroughly rooted and grounded in the faith that the negro is only an animal, and that the salvation of this nation in particular, and the world in general, depends upon his being kept in bondage. Enter the home of one of this class, and make yourself familiar with the spirit that prevades it, and I think it will not require a very long sojourn therein to convince you that the condition of his pigs is far preferable to his children, in so far as respects facilities for attaining the highest end of their existence. Now I grant this may sound a little extravagant, yet I think that no one who has had an opportunity for observation will deny that the tendency among our rural population, and especially in districts remote from large towns, is to subside into a sort of half-animal existence, and it is only by constant watchfulness and effort that this tendency is counteracted. I believe no intelligent farmer who has ever been a dozen miles from home, mingled among men of other callings, and observed the quickening and sharpening effect of constant intercourse with others in the way of business or pleasure, but has felt with a sigh that he, too, is "a man of whom more might have been made."

There are scattered here and there all over the country, men, who in their boyhood had longed for a more satisfying life, a higher cultivation, but who, from various causes,—perhaps by reason of the burden of debt resting upon the homestead, which his strong arm must help to lighten, or from paternal unwillingness to give him a start in another direction; or what so many have longed for in vain, even permission to go out and work his way alone. I say there are many such, and noble men they are, too, many of them, who have quietly given up all their hopes, and set themselves heroically to do their best in the lot which seemed to be marked out for them. For I hold it to be the highest heroism for one to reconcile himself to, and work heartily and cheerfully in a calling into which he may have been forced against his will.

But, Mr. Editor, this is an extensive subject, and as I fear I have already trespassed too far, reserve for another letter a few more things that I have in mind concerning the disadvantages of rural life.

F. M. GAY.

THE LOWER CANADA AGRICULTURIST.

We have delayed the publication of the Agriculturist so as to include the Prize list. We would again ask of our subscribers to forward as soon as possible the amount of their subscriptions, and inform them that not a single number of the Agriculturist will be addressed after the 1st of September, without being prepaid. We would also ask of the postmasters to return the numbers of the Agriculturist not called for, and now in their possession. We have but few of the back numbers, and not enough to meet the demand.

FARM OPERATIONS.

TOBACCO CULTURE IN CONNECTICUT.

Preparation of the Seed Bed.

We have generally prepared the seed bed in the fall, by heavy manuring, ploughing in deep, and leaving the bed in a rough state till the following spring. As soon as the frost is out of the ground, spade the bed over, for the purpose of bringing the manure to the surface and thoroughly mixing with the soil at the same time clearing out all roots of weeds and grass.

After levelling the bed we make the soil as compact as possible, either by rolling with a heavy roller or tramping with the feet. We then rake the surface lightly with a fine tooth garden rake, and sow the seed, raking lightly to cover it, and then roll or tramp it again.

The seed is so very small, being smaller than mustard seed, that it is better to mix it with dry muck or ashes before sowing, as it is more evenly distributed on the bed. We sow about as thickly as in sowing cabbage seed in the garden. The bed is treated precisely as a bed in the garden, in weeding, &c.

When the plants have three or four leaves, which should be about the middle of May, on a rainy day we sow on about 2 quarts of fine guano per square rod, being particular to sow on the guano while it rains, for if the sun comes out soon after it is sown, there is danger of burning the leaves.

Preparation of the Ground.

In preparing the ground for setting out the plants, we think it best to harrow in the manure, which should be fine compost. We use from 40 to 60 ox-cart loads per acre—(the ox cart load is about 35 bushels).

We use Shears' Coulter harrow for the purpose of thoroughly incorporating the manure with the soil.

The land being manured and well harrowed, we set the teeth of our marker $3\frac{1}{2}$ feet apart, and mark it out one way. We then raise a ridge about 6 inches high, by turning two furrows together with a one horse plow. The ridges being made, we mark across them making the marks $2\frac{1}{2}$ feet apart.

We generally have used some special manure for the purpose of giving the plant a start. We have tried Peruvian guano, about 300 to 600 pounds per acre; castor pomace, from 300 to 2,000 per acre and the Lodi Companies' pondret 2 to 4 barrels per acre.

The guano and castor pomace it is necessary to sow on the marks, or in a furrow made for the purpose, before making the ridges (thus being directly over the guano or pomace) as so large a quantity placed in the hills would destroy the plant.

We like the pondret best, as we can place that in the hills without injury to the plant.

We also think the pondrette gives the best tobacco.

We make the hills at each intersection of the marks, with a hoe, spitting them lightly, thus making the hills $3\frac{1}{2}$ by $2\frac{1}{2}$ feet.

We set the plants from the 5th to the 15th

of June, choosing, if possible, a rainy or damp day for the the purpose though I have seen very handsome crops raised set as late as July.

Insects Injurious to the Crop.

Some years we have been greatly troubled by cut worms, for which reason we have been in the habit of plowing in a green crop, either hay or clover, which feeds the worms, and consequently they do not eat the tobacco so badly.

The cut worm usually finishes its work of destruction by July 4th, up to which time, when a rainy day comes all hands turn and set over the plants missing.

The green, or tobacco worm proper, commences operating about July 1st. We often find the eggs (of the miller, which produce the worm) on the under side of the leaf; they are about the size of a large pin's head, and a light pea color. The miller flies by night, and is rarely seen. I have never seen but two in the years we have raised tobacco. The head looks very much like an owl's; the body is grey in color, about $1\frac{1}{2}$ inches long and the wings, when spread, extended about 3 inches from tip to tip. The green worm is a constant source of annoyance from its first appearance until the tobacco is cut. We sometimes have to go over the ground every day for worms, though in some seasons once a week will suffice.

Cultivation, Harvesting.

The tobacco will not grow much until it is hoed, as the ground becomes hard and must be well stirred to give the root a chance to start. We use Nourse, Mason & Co's horse hoe for cultivation between the rows. There is an advantage in setting the plants on a ridge, for they are not so apt to be covered with dirt by the horse hoe, or by a heavy shower. We generally hoe as we can, but rarely more than three times, unless the ground is very weedy, which should not be the case in good farming.

The cost of production varies greatly with the seasons as when we have a dry season we have to water the plants and cover them with a little cot, to prevent the sun from scorching them. The past season was very favorable, there having been so much damp weather about setting time that we did not cover or water a plant on $4\frac{1}{2}$ acres.

After the tobacco is set the labor is about double what it is on corn. I have never made an exact calculation of the expense of raising tobacco; but for myself I can say I would rather take care of an acre of tobacco than two acres of corn. The land which will produce 2,000 pounds per acre of tobacco, will not produce over 70 bushels of shelled corn, which shows a large difference in favour of the tobacco.

About the middle of August the tobacco is in blossom. We then go over the field and break off the tops, taking off about 4 or 6 leaves with the top, according to the size of the plant.

In about a week a sucker starts at the junction of each leaf with the stalk. These must

be taken off before cutting, as if left on, it is very inconvenient to handle the tobacco.

We generally begin cutting about the 10th of September, for by that time most of it is ripe, and if it stands after it is fully ripe, and it will often rust. The rust is in spots on the leaf, and injures the quality.

We commence cutting in the morning after the dew is on, and let it lay for a while to wilt, being careful not to let it lay long enough to get sunburnt. After being wilted enough to handle without breaking the leaves, it is placed in a cart or wagon and drawn to the curing house, which is generally a shed or rough building, which may be shut up close or opened to let in air. The best buildings are about 24 or 36 feet wide, and as long as convenience may dictate—36 feet allowing of three 12 feet rails across the building. We hang from 26 to 47 plants on a rail, according to size.

The butt of the stalk is placed against the rail and the twine passed around it, the twine being on top of the rail between every two plants, as they are placed on alternate sides. The rails are about 20 inches apart, allowing room for a good circulation of air, which is absolutely necessary, as without it the tobacco will sweat on the poles, and is lost.

In about six weeks or two months the tobacco is sufficiently cured to strip. After it is well cured the first damp day we open every door and window to let in the air, for it is necessary to have it damp to keep it from breaking.

When it is taken from the poles it is placed in a pile, a double tier, the tips lapping about 6 inches or 1 foot, butts evenly laid and close-packed to prevent drying.

If not damp, it may lay so for several days without injury, but it requires close watching to prevent it from heating. We divide it after stripping into three kinds, called wrappers, seconds and fillers. The wrappers are the choicest leaves, the seconds have many imperfect leaves and bring about half the price of wrappers, the fillers are the poorest leaves and bring about one-third the price of wrappers. When the leaves are put together and a leaf coiled around the butts which makes a hand. As a general thing the more particular, in assorting, the better price we get. I have seen a really nice lot of tobacco sold for a small price for want of care in assorting.

I think we have averaged 15 cents a pound for wrappers, 7½ cents for seconds, and 5 cents for fillers during the seven years we raised tobacco, and the weight would average 1,500 pounds per acre, though we have raised 2,200 pounds on one acre, and sold it for 20 cents per pound for the first quality.

In such a yield as the above there would not be over 300 pounds the first and second qualities both together. After stripping, it is evenly packed in piles, (keeping the various qualities separate, of course,) butts out and tips lapping a very little, three or four inches perhaps. We do not case it, but sell to dealers who do. The case is made of merchantable soft pine boards, and is about 3½ feet

long by 24 wide and 2½ deep. About 400 lbs. of tobacco are put in each case, by means of a screw. In a few days after casing, the sweating process commences. During some stages a person not acquainted with it, were he to examine the tobacco, would say it was worthless, being perfectly soft and apparently rotten. I have often seen the outside of the case so hot as to draw the pitch from knots in the boards.

The tobacco must go through this process before it is manufactured, to give it the necessary finish. This year we shall probably get a higher price than ever before. I have already heard of 35 cents per pound being offered for all three qualities.

I believe there is, comparatively speaking but little tobacco raised in the state, out of Hartford county; the Connecticut river and Farmington valleys being particularly adapted to its production. JOHN C. ROBERTS.

EXPERIMENTS IN POTATO CULTURE.

In the cultivation of potatoes, a point which it is desirable to ascertain, is at what distance they should be planted to insure the greatest yield or the greatest quantity of marketable potatoes. In reference to this point, it appears that the Maine Board of agriculture, at its session last winter, passed a resolution in regard to experiments which the members pledged themselves to make, the substance of the resolution being as follows:

“Select a piece of land, of as uniform quality as may be; manure the whole equally; divide the piece into four equal lots; lay out the whole in rows three feet apart; plant the first lot in hills three feet apart in the rows. Plant the second lot in hills two feet apart; the third lot in hills one and a half feet; and the fourth lot in hills one foot apart in the rows.”

The Maine Farmer publishes the results of experiments made by Mr. Rogers, member of the Board for the county of Sagadahoc. The experiments seem to have been fairly conducted as far as they went. There are, however, one or two important points involved in the trials, on which we have no definite information: as, first, Was the quantity of potatoes planted, the same per acre, in all cases. Second, if there was a difference in the quantity planted, was that difference taken into account in the return? It is obvious that if the same weight in bulk was planted per hill in all cases, it would require but one-third as many potatoes per acre where the hills were three feet apart. This would make a difference in the cost of the crop of no trifling importance, reckoning potatoes at the price they usually bring at planting-time.

But the results reported by Mr. Rogers are nevertheless interesting, and comprise points of value. They are summed up by the Farmer as follows:—

	Bushels of Merchantable.	Bushels of small.	Total No. of bush.
No. 1 produced.....	3½	1½	4½
No. 2 produced.....	3½	2	5½
No. 3 produced.....	3½	3	6½
No. 4 produced.....	3½	3½	6½

The second experiment was with California or Jenny Lind potatoes on a sandy soil, without manure, with the following result:—

	Bushels of Merchantable.	Bushels of small.	Total No. of bush.
No. 1 produced.....	4½	1	5½
No. 2 produced.....	4½	2	6½
No. 3 produced.....	6	1½	6½
No. 4 produced.....	4½	2	6½

From the above experiments it appears that in the first instance the largest number of bushels raised was from the lot planted one foot between the hills, although the lot which gave the largest number of good size, marketable potatoes was No. 2, or from hills two feet apart in the rows. From the second experiment we gather results of nearly the same kind, although the greatest yield in this instance is from the lot planted two feet apart in the rows, while the largest amount of saleable or good yield potatoes was obtained from lot No. 3, or that planted one and a half feet apart in the rows. The figures of the first experiment also show that while No. 4 (planted one foot apart between the hills), produced the heaviest yield, yet they were nearly as many potatoes reckoned small, as there were called *merchantable*. So if it is an object to raise potatoes for the market, that distance apart between the hills should be chosen which would give the largest number of bushels of good sized potatoes. From the experiment, Lot No. 2,—two feet between hills—has produced that. In the second experiment we find a variation from that of the first, in some particulars. The California is a potato chiefly valuable for feeding to stock, and as it grows very large, requires more room. It is from this fact, doubtless, that the lot planted two feet apart gave the largest yield, although the greatest number of marketable potatoes was from No. 3. In raising potatoes for stock it is desirable to plant them that distance apart which will give the heaviest yield from a given spot of ground. In the second experiment above, this is produced from Lot No. 2.

PRINCE ALBERT'S FARM.

According to a writer in the Philadelphia *Ledger*, the late Prince ALBERT'S farm is situated near Windsor Castle, about twenty miles southwest of London, occupies one thousand acres,

one hundred of which are never plowed, and is wooded and sown with orchard grass, top-dressed every four years with liquid manure. The arable land is subsoiled every two or three years with enormously large Scotch horses, driven tandem; rotation of crops much the same as ours, without the indian corn.

Barley and oats are crushed in a mill driven by steam; eighty short horn, and Alderney cows are kept; cow-stalls made of iron; iron troughs always full of water in each stall, with waste-pipe to gutter behind them, and thence to manure-shed, from which it is pumped into carts similar to ours for watering streets, and sprinkled over the grass. Keeps none but Suffolk and Berkshire pigs; prefers former on account of their taking on fat; as one of the swine-herds said, "A dale of fat a dale quicker."

The pig-pens are of stone, and paved with stone, being lower in the centre, from which a pipe conducts the liquid manure to keep. In the garden I saw peach, apricot, and plum trees trained espalier; pine apples, strawberries, and grapes, in all stages of growth; the latter more than in countries to which they are indigenous, and ripe all the year round. Melons will not grow in the open air, but they have very fine ones in frames. Her Majesty must certainly fare sumptuously every day. There are forty men to attend to the garden alone.

Mr. Tait, the gentlemanly manager of the farm, gave me every information desired. I also went to see the Queen's stables at Buckingham Palace; they would make more comfortable dwellings than two-thirds of the people live in. English farriers have found out that the upper part of the stall ought to be lowest by two inches at least. There are in those stables one hundred and six horses. Her Majesty is partial to greys, and may be seen driving two in hand in Windsor Park. The Princess Alice drives four ponies, and is said to be an excellent horsewoman. I saw the eight cream-colored horses that draw her Majesty at the time of opening or dissolving Parliament. Their harness is red morocco, gold mounted, cost \$10,000; and the state carriage cost \$35,000 ninety years ago.

BREEDER'S DEPARTMENT.

THE TREATMENT OF BRUISES.

SIMPLE and easy as is the treatment of ordinary bruises and wounds, there exists regarding them much misconception and error. Ignorance is apt to be either supinely careless and neglectful, or it falls into the opposite fault of undue meddling and doing too much. It is addicted to remedies which have a decided and immediate effect, and often errs in using active and violent measures when simple and soothing means would be preferable. Setting aside hot oil salves, and those misnamed healing ointments, we find wounds and bruises generally make more rapid and satisfactory recoveries when simply or rationally treated with hot or cold water, appropriate bandages, and scrupulous cleanliness.

Bruises differ materially in their severity

from the slight galling of a badly-stuffed saddle or indifferently-fitting harness to the extensive contusion of a smart kick or violent blow. In the former class of cases the injured part must be carefully relieved from chafing or pressure; and as the inflammation is but slight and superficial, it is readily subdued by rest and bathing with salt and water, vinegar and water, or any other convenient cold application. When the bruise is severe and considerable, the parts speedily become much inflamed, and, in consequence, are hot, swollen, tender, and painful. The external vessels may be injured when the surface is black, and the inflammation is especially acute around the spot so severely injured. In such cases hot fomentations are necessary, whilst to secure their fullest benefit they must be employed repeatedly and for several hours.

continuously. A good sponge or a large piece of soft porous rug or flannel is the best means of application. If a poultice can be conveniently applied and secured, it may then be used. There is much diversity of opinion regarding the respective merits of the different sorts of poultices, and whilst some prefer bran, others use turnips, and others again affect oatmeal, linseed, or barley dust. But there is really no special merit in any particular ingredient. That is best which longest retains the heat and moisture, in which the virtue of the poultice essentially consists. For veterinary purposes a mixture of bran and oatmeal, or bran and one third of linseed-meal answers the purpose extremely well, and is always softer and better if properly boiled instead of being only scalded, as is commonly done by water over it. For many bruises, spongio-piline is now preferred, and when saturated with hot water and dexterously secured, it is usually more easily kept on than the poultice, whilst it is less apt when used for a considerable time to injure the adjacent sound skin.

When a contusion of the soft parts is extensive, and there is much tenderness and swelling, a few cuts with the lancet or knife will liberate the extravasated blood, unload the overburdened vessels, check the growing inflammation, and relieve the tension and pain. Of the propriety of such an operation, the properly qualified surgeon must be the judge. To keep down inflammation, perfect rest must be enjoined, a dose of laxative medicine given, oats, beans, and other such stimulating food withheld, and the diet mainly restricted to green food mashies and other such laxative and cooling articles. When an injury has been extensive, a portion of the injured structure frequently dies, and becomes gradually separated by a sort of natural dissection from the adjacent sound tissues, forming what is known as a slough. This dying portion must not be too hastily or roughly removed. By a bloodless amputation, as it were, nature closes up the vessels that connect it with the living tissues, and gradually separates the hopelessly diseased from the healthy tissues, whilst underneath and around the new structures are slowly growing and displacing the slough. Grooms and farriers often adopt a most rude and cruel method of getting rid of such slough. Into the wound they rudely insert some irritant matters which induce violent inflammation in the already excitable parts. Such treatment may certainly hasten the removal of the slough, but it also weakens and extends the wound, retards healing progress and increases the chances of a permanent scar or blemish. Perfect rest, with hot fomentations, moderate the inflammatory action; patience, poultices, and gentle traction usually suffice to bring away any slough; a little landanum and sugar of lead lotion alleviate the pain; the pressure of carefully adjusted bandages and an occasional touch of any convenient caustic prevent the undue growth of proud flesh; whilst as the tenderness disappears the removal of swelling or discoloration is expedited by friction, cold-water applications, and wetting with diluted solution of muriate of ammonia. When the

swelling continues after several weeks, and after all tenderness is gone, and any wound is perfectly closed, the hot oils, blistering ointment, or other such stimulants may be very properly tried. But it must be remembered that they are only useful after all inflammation is subdued, and that when used in recent cases they increase the irritation, and "add fuel to the fire."

FEEDING HORSES.

The feeding of horses is an important subject, on which we will give a hint or two. The actual amount of food consumed by a horse will depend upon his form and disposition. I have found that horses of a compact form and quiet disposition, weighing 1,200 pounds, and exerting a force equivalent to moving 150 or 200 pounds at the rate of two miles per hour, for 10 hours per day, and six days in the week, will require each 20 lbs. of oats, 14 lbs. of hay, and 70 lbs. of water, with a comfortable stable to keep them in order. Much depends upon the horse having a keeper who knows how to use him without harshness.

THE FEEDING AND STABLE MANAGEMENT OF HACKS,

A CORRESPONDENT from the neighbourhood of Arbroath evidently fond of his horses, and probably doubtful whether their stable comforts are duly attended to, requires our advice as to how they should be fed and managed; whether they should wear covers, and how they should be groomed when they return home wet, dirty, and heated. Our correspondent further hazards the opinion that information on such topics would be welcome to many "constant readers" besides himself, and we accordingly make his important queries the text of our weekly article.

It is somewhat difficult to lay down any rules as to the feeding of horses who scap acities differ almost to which the queries, we presume, mainly apply should be limited to a daily allowance of 12 or 15 lbs. of good old hay, and will eat besides about 10 lbs. of old oats, which should be given in three feeds along with along a little chaff or bran, in order to ensure their thorough mastication and digestion. A pound or two of old beans or better still of old peas is often added, especially for harness work. For some years we have been in the habit of allowing our horses a pound daily of linseed cake, which keeps the skin glossy, and helps to contract the heating tendencies of dry hard food. Unless they are being prepared for very severe work, even the lighter sorts of horses are the better of a bran mash once a week. Water should be freely allowed at least twice daily, but never within two or three hours of fast work. To bring well fed horses into good condition, and fit them for severe exertion, they must have at least two hours daily exercise, of which about one half should be at a smart trot. To prevent injury of the legs and feet it is important that horses be exercised on soft ground.

The propriety of keeping the horse clothed

in the stable is usually a matter of taste. If the stable is comfortable warm and the grooming good, covers can be dispensed with, and we know horses that make a very creditable appearance in the hunting field that are never clothed. If the nature of their work keeps them standing much exposed, they will be less liable to colds if unclothed in the stable. Where however, clipping and singeing are practised a woollen rug had better be used. The prevailing fashion of turning the horse out denuded of his winter coat will probably now become still more common if the new clipping machine comes in use. The practice, although certainly unnatural, has many recommendations. It prevents undue and reducing perspiration so inevitable where work is performed in a long coat; it enables the horse to do his work more easily and comfortably, whilst it expedites and facilitates cleaning and grooming, and diminishes the chances of cold from the animal standing as he is now apt to do, shivering for an hour or two in a tardily drying long coat. This is very prejudicial to every horse, and is a most fruitful source of colds, influenza, and various other ailments.

Even good grooms differ as to the manner of performing the several details of their duties, but all agree in promptly attending to the horse that has returned from work, wet, dirty, and heated. It is dirty and uncomfortable alike for man and beast, to do the grooming in the stall or box; but except in the heat of the day and in fine weather, when the outer air will do no harm, the horse must be brought under cover of a convenient shed or unused stable. The stable besom applied to the legs and belly will remove the "rough of the dirt." Stripped in his shirt sleeves, with a bucketful of tepid water and a soft brush, the groom then carefully washes the legs, feet, and belly. This done, the saddle is taken off, and the head and back rapidly sponged so as to remove every mark and speck of dirt. When the horse is bare clipped, the body is generally sponged all over with tepid water, and the practice is good where the groom is careful at once to thoroughly dry the animal. The horse may now be taken to his stable or box and have a few oats, a lock of good hay or if his exertions have been great, a couple of quarts of well boiled oatmeal gruel. And whilst the horse thus regales himself, the diligent groom will carefully rub him dry, first with the hay wisp and then with a dry cloth. The well shaken rug is then put on, the bucketful of water and supper given, and the bed comfortably made up. The bits and stirrup leathers or harness then come in for their rubbing up, the saddle will be sponged, and the girths and reins well washed and thoroughly dried.

To do up a hack nicely and comfortably takes nearly an hour, and a fatigued hunter will demand still longer and more careful attention. The horse that labours for us so cheerfully and well, surely deserves to be properly tended, and his good looks and satisfactory performances are a very reasonable measure of the grooms anxious and pains-taking care. When he is chary of his time and labour

and leaves the stable half an hour after his horse is brought home, you may be sure that your work is slurred over and neglected, that your horse cannot be thoroughly cleaned, or that if washed, he is not half dried. His coat next morning will be rough and dusty, and will require an extra hour's work before it looks sleek and comfortable.

TO CURE KICKING HORSES.

—"J. R.," in the Rural New Yorker, recommends the following plan. "Let the horse stand between two partitions. Bore a two inch-hole in each, on a horizontal line, about 1½ inches above the horse's hips, take a round stick long enough to reach across the stall, and place it in the holes, and put a pin in each end of the stick so that it cannot fall out. The horse may try to kick, but will not be able, as the stick will prevent the necessary elevation of his hind quarters, and after a few attempts he will give it up."

HINTS ON BUTTER-MAKING.

Depth of Milk.

Col. PRATT, of Prattsville, Greene county, formerly the celebrated tanner, now equally successful with the Dairy, finds that the largest quantity of cream rises, and consequently the greatest quantity of butter is made, when the milk is one and a quarter inches in depth in hot weather—and an inch and a half deep in cool weather—seven or eight quart pans thus containing but two and a half quarts for the first named depth, and three quarts for the latter. The temperature is kept as nearly as possible to 62°, although in warm weather it may run up to 65°, and in extreme cases to 70°.

New way of Making Butter.

J. Zoller, of Oswegatchie, N. Y., saves the labor of setting his milk in pans, skimming, and taking care of the cream, by simply straining the milk of one day into six churns, and churning next morning, by horse power, the milk being then sour, but not loppered. He thinks he also makes more butter in this way, from the same quantity of milk. The milk being sour, produces butter more readily than if fresh. An experiment, carefully made, with cream from pans, and by the above method, resulted in giving 10 per cent more butter from the churned milk.

Washing butter.

A correspondent of the Boston Cultivator says he has not had rancid butter in the spring for thirty years. He washes it. Not with water, which he, with most good butter-makers, regards as injurious, but with sweet skim-milk, salting it afterwards. Have any of our readers tried this way, and with what results? There are some good butter-makers that wash their butter with water, and make a better article than some bad manufacturers who do not wash it. But equal skill, cleanliness, and careful management, would doubtless with these good manufacturers make better butter without washing.